

HIGHER MEDICAL CULTURE



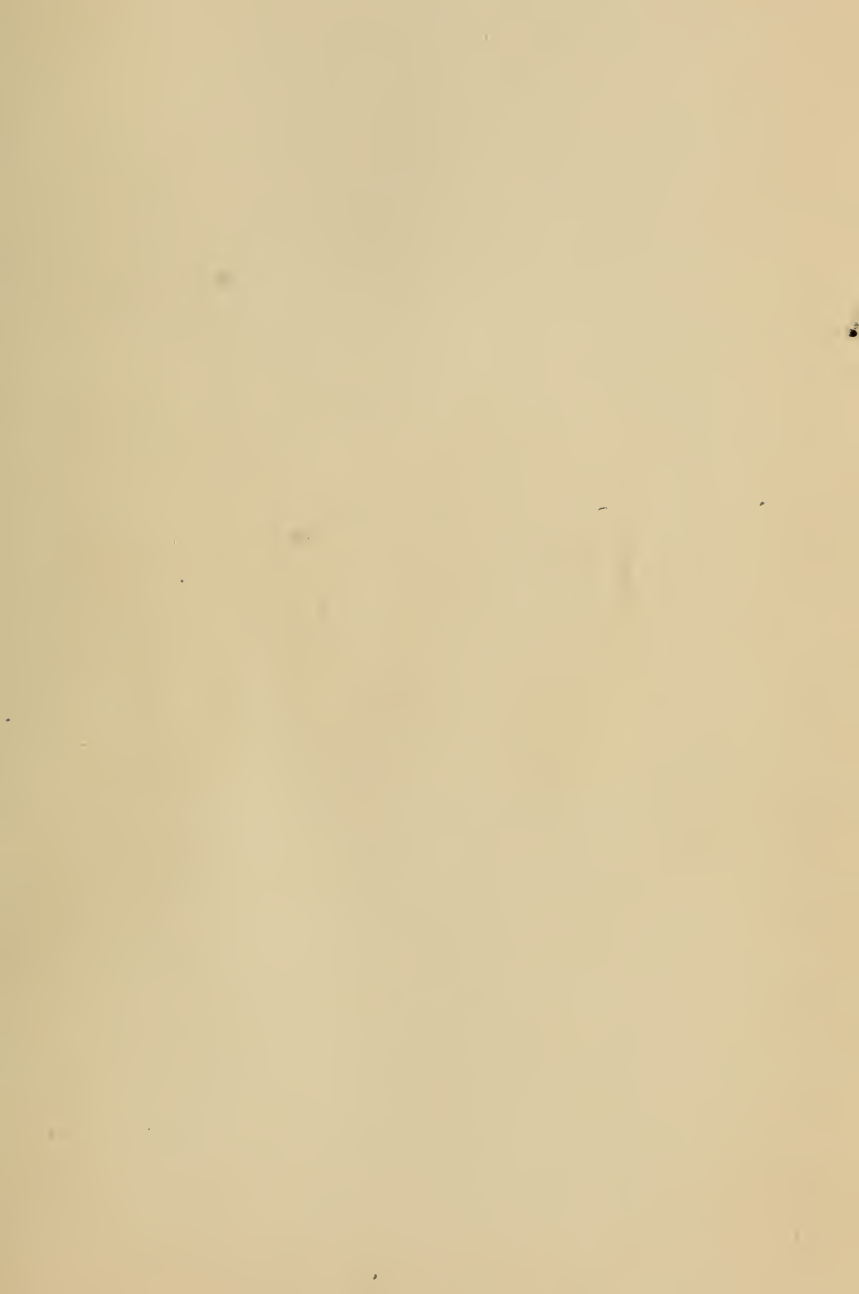
W. R. DUNHAM, M. D.

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HIGHER MEDICAL CULTURE.

*The law of instinct is the law of the living principle.
A department not presented or defined in medical literature.*

HIGHER MEDICAL CULTURE.

Medical Science

BASED ON

THE FOUR VITAL PROPERTIES AND LAWS
OF ORGANIC FORCE.

BY

W. R. DUNHAM, M.D.



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INTRODUCTION.

Write on your doors the saying wise and old,
“Be bold! be bold!” and everywhere, “Be bold!
Be not too bold!” Yet better the excess
Than the defect; better the more than less;
Better like Hector in the field to die,
Than like a perfumed Paris turn and fly.

H. W. LONGFELLOW.

THIS volume is prepared with a view to call attention to a department in medical science, which has not heretofore been presented for consideration through medical literature.

While the direction of present research is largely being made for a discovery of both new cause of disease and “active medical properties,” with more special attention to the grouping and describing of the appearances of pathological conditions, we shall

have little to say of those mentioned divisions of research ; but call attention to the properties, laws, and principles of organic force as related to the cause of disease, and being the active agent which gives existence to pathological facts ; thus presenting a theory or explanation which connects the discovered cause with the described consequences ; or, in other words, we propose to present a theory of medical science from the basis of organic force.

We believe it is conceded by very numerous and highly cultured representatives of medical science, that our department of alleged scientific erudition is without accepted or known fundamental principles, which give unity and precision to scientific methods ; also that when placed in relations of comparison with other departments of natural science, medical science has failed through research to discover and elucidate the *laws of force*, which give activity to the phenomena of their department of organic

nature, with any such degree of satisfaction as has been demonstrated with those departments of science which present the phenomena of the inorganic forces.

Notwithstanding the important and practical significance implied in such fact of omission, it is well to remember that the medical mind has been dealing with a department of Nature's *forces* which are a thousand times more intricate in their subtle relations with expressed phenomena, than any found in the departments of inorganic science. While such delay may be thus excusable, it certainly remains true that the researches in astronomical and chemical science failed to discover Nature's plans and laws of force in those departments of inorganic nature until a very recent comparative date. Thus, while the medical department has been more tardy in obtaining the fruit of diligent research, there is in palliation the unquestioned fact to consider, that our problems in Nature are vastly more

profound. A certain eminent physician has said, in defining the direction to be pursued: "Medical science demands of her votaries unceasing toil and investigation, with the enthusiasm and courage of pioneers, to explore unknown regions, cultivate barren wastes, and perfect a knowledge in the true spirit of philanthropy that will stamp its impress on the coming ages, by the development of a *law* which can accurately measure and classify morbid states; a better knowledge of the *nature* of disease will aid us more than all the drugs discovered during this century." We trust no one will deny the statement that medical science, in common with other departments of natural science, is based on *two* prime ultimate factors, which factors become the starting points from which all methods of procedure in theory and practice must depend. One factor is material. The other factor is organic force.

The same is true as to chemistry and

astronomy. With these last mentioned sciences, the force active is an inorganic power, while in the department of medical science the *force active* is vital power, or organic force. The material with which organic force must engage is classified in two distinct natural divisions, ever important to recognize; namely, nutritive and foreign. What organic force, or vital power, may do with nutritive material has been most minutely described and correctly expressed in the many text-books on physiology. What organic force, or vital power, may do with the division non-nutritive, or foreign material, including medicine and poison, together with the laws and methods of procedure, is a department in organic nature which is not explained in any medical text-book in existence.

Thus we affirm that the missing link in medical science is found, and implied, in the *laws* and *methods* which organic force displays in relation to non-nutritive material.

While the department nutritive has been disposed of with entire satisfaction, the subject of *law* and *method*, with foreign material, is quite largely hidden in obscurity. Thus the subject before us will be implied in the relations and dealings of methods and procedure which organic force adopts, as an *active* agent in relation to foreign material.

It is true that what is called *vis medicatrix naturæ* has been recognized, but what is really implied or involved as expressed through such term? Is it not reasonable to presume that in the recognition of this principle we have the cue to expectation that much may be revealed of great usefulness in the affairs of life, through a correct knowledge and law of *all* that is implied in the fulfilment of such a principle? It is this principle in organic nature that we propose to present.

In this department we are quite largely exploring in new fields for explanation of organic methods. While such literature is

not abundant,—and for what reason neglected we are unable to explain,—yet it may not be without interest to consider what this department seems to reveal, which Nature has long held as trustee for mankind. In brief, we say, that what is erroneously called *vis medicatrix naturæ* is really no more nor less than organic force *instinctively* directed in relation to non-nutritive or foreign material, with a view to the self-preservation of the organic body. Prof. Robley Dunglison, M.D., says, in his “Materia Medica” (Vol. I. p. 34): “The *vis medicatrix naturæ*, for and against which so much has been said, can no more be denied than the existence of life,—of which we know nothing except by its results.” We propose to illustrate that this so called *vis medicatrix naturæ*, which is really a manifestation of organic power *instinctively* directed, is the *only* power, force, ability, or *agent* ever *active* in the affairs of disease, or in relations with medicine.

Intelligence relates to the control of this

principle, or *power*, *only* indirectly, through a knowledge of the *laws* of organic instinct. Thus, to know the full function and possible usefulness implied in the erroneously so called *vis medicatrix naturæ*, we are required to comprehend the laws of *organic force*, which execute the duties of this department. While we shall have much to present for consideration in name, nature, and properties involved in the duties and activities of organic force,—which department has always been one of serious omission,—we also desire to state that we are not alone in finding cause for criticism with this department. Says Henry Maudsley, M.D., F.R.C.P., “It is easy to perceive how impossible it is in the present state of science to come to any positive conclusion in regard to the nature of the vital force.” And it has also been said by equally eminent authority, that “this generation, and generations to come, will have passed to their everlasting rest before a discovery of the secret of vital activity is

made." We propose to explain the nature, law, and methods of organic force or "vital activity," giving such illustration of the "nature of vital force" that positive verification and demonstration will prevail, without premises for a possible supported contradiction.

To further illustrate that there has long existed great dissatisfaction in the minds of prominent medical scholars relative to the application of intellectual research to medical science, as a *science*, we will here quote the language of Prof. M. Majendie, the celebrated French physician:—

"Gentlemen, medicine is a great humbug. It is nothing like science. Doctors are mere empirics, when they are not charlatans. We are ignorant as men can be. I must tell you frankly that I know nothing about medicines. I repeat to you, there is no such thing as medical science. I grant you people are cured; but how? Nature does a great deal, but doctors do devilish little."

Science applies only to organic force, not to medicine! Says Prof. N. Chapman, late

of the University of Pennsylvania, in his "Materia Medica" (Vol. I. p. 3): "Medical conclusions differ very widely from every other species of evidence. We cheat ourselves with a thousand illusions." Says Dr. James Mason Good, the noted writer of medical literature, "The science of medicine is a barbarous jargon." Such remarks from our very eminent medical scholars find cause for expression, because no clear idea exists relative to the *law* and *nature* of organic force, as applied to methods in the affairs of life involved in disease, and in relations with medicine.

The science of medicine is not found in the direction of what is called "active medical property," but in the direction and within the domain of *active organic force*, developed into activity through the agency of the vital property, instinct. While there is much to acquire through research in the field of organic forces, there is also much to condemn of serious commission, which *imagination* has sup-

plied to take the place of the alleged neglected omission. This imaginary department includes not only errors of language, which represent no principles in nature, but implies erroneous and dangerous *thought* when made applicable to the affairs of life. In illustration, we here mention, and in the proper place shall make, and endeavor to maintain, more specific charges.

We declare that there is no such principle in Nature as so called "active medical property." There is no "active medical principle." Such doctrine is based on the erroneous interpretation of appearances, and nearest of kin to that delusion which pre-saged the doctrine that the sun revolved around the earth.

What is called the *modus operandi* of medicine is really pathological vital action instinctively directed in relation to the presence of the medicine. Disease is very largely pathological vital action, of acute or chronic manifestation. Medicine does not

act on the human organism, but its *presence* becomes a *cause* for the instinctive organic power to be directed differently. Medicine becomes useful, not because it *acts*, or has "active properties," but from the fact that its presence becomes a *cause* for the vital power to act differently.

The present plan of medical practice is based on the imaginary principle called "active medical property," which doctrine has been so universally accepted that a belief has developed with the laity that the great essential with invalidism is to supply sufficient of this "active principle." Thus it is fast becoming a matter of indifference who shall supply this "active principle" in material form. As a legitimate result of such indifference, a large amount of medical practice will go into the hands of ignorant medicine pedlers, to the great detriment of the invalid and the belittlement of professional attainment.

A correct practice of medicine must be

based on the *law* of the instinctive action of organic force. Thus the duty of the physician is to *comprehend*, and be ever watchful of the proceedings of vital activity, and to *guide* such activity most safely to the best possible results. When the laity so understand this subject, no intelligent person will trust the management of their case with any reputed physician not liberally educated and familiar with the *laws* of instinctive organic force. The astronomer cannot ignore the inorganic laws of force, and make legitimate claim to being a student of science ; neither can the physician make valid claim as an intelligent practitioner of medical *science* without a knowledge of the laws and properties of instinctive organic force, which gives activity to the various phenomena he is required to consider.

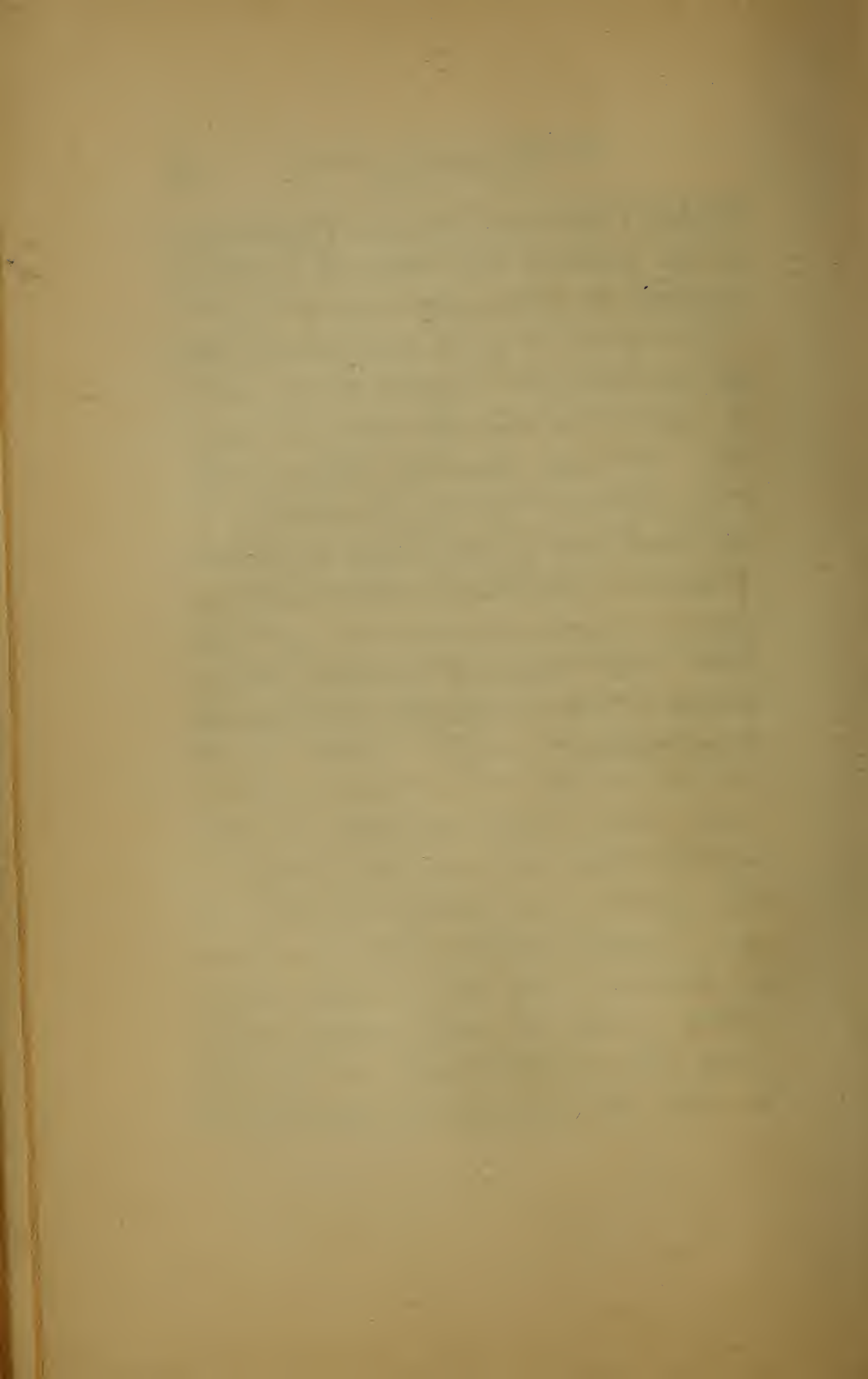
This volume will include the defining of the several vital properties of life, with their alleged sphere of fulfilment and compensating relations of purpose, together with such

laws of general application in aid of self-preservation of the organic body as will furnish a basis for the making of a more extended application of organic force or vital instinctive activity, in the name of theory and practice and become applicable in the treatment of disease. From such basis of fundamental principles we have an equally *positive law* on which to establish a theory and practice as exists in the departments of inorganic science.

No other department of erudition remains enshrouded in such mystery as is confessed through medical literature to exist in that of medical science. The time has arrived when the profession cannot afford longer to pursue a phantom, and ignore research from the true premises of a science. The doctrine of "active medical property" represents neither a fact nor a principle in medical science, while our present medical philosophy is without principles that enable the profession to comprehend the nature of

disease, or the *modus operandi* of medicines ; and the nature of vital activity is a problem postponed for future generations to solve.

The solution of the various problems, and the development of a medical science, are to be found in the laws and nature of organic force. We must accept the aphorism that, if the practice of medicine is entitled to be considered from premises which are implied in scientific principles, it becomes legitimate inquiry to ascertain the nature of such principles. This volume will contribute little of interest to those who practise medicine only as an industry.



MEDICAL SCIENCE

BASED ON THE

VITAL PROPERTIES AND LAWS OF ORGANIC FORCE.

IN considering the department of vital properties and laws of instinctive organic force for the purpose here set forth, we find ourself quite largely exploring in a direction which has failed heretofore in being recognized with that degree of importance which legitimately attains to the subject.

While we do not expect to see and comprehend all which this department may reveal in aid of a correct and scientific method for the practice of a medical science, we shall anticipate and also invite an honest criticism, which we trust may be of extreme value in shaping the medical mind into better rela-

tions with cause and effect, developing more extensively and clearly the great principles in organic nature which will aid in the development of the science.

It is not to be presumed that we anticipate the presentation of a new plan of life, but more correctly to approximate a representation of the real plan. With this problem, we have for examination an organized live human being, endowed with certain qualities and organic abilities, which exist in significant distinction to the individual of material form.

The individual human being has certain and separable unlike special vital properties, through which, both consciously and unconsciously, it becomes possible to hold *active* relations between itself and the outer world, of which the organized material self may be no part.

In the name of Sensibility, Sensation, Instinct, and Contractility, — which qualities of life expression are not subject to a sub-

division of function, although possessed of great diversity of expression, — we have *four* ultimate vital properties, through which the human organism may express relations both with itself and with the outer world.

As applied to our purpose with the problem of medical science, of comparative relation, we say that no science of astronomy could be taught until a correct *plan*, and *laws* of inorganic force, became recognized. And thus it is with medical science: we are required to recognize both a correct *plan* and the laws of organic force, which execute method in the fulfilment of purpose.

Thus the principles which are to be considered as involved in the problems of medical science are principles existing and implied in the nature and laws of vital purpose. Therefore, what the human organism fulfils in the aggregate in this direction can be *best* determined by an examination separately of the distinct vital properties. In other words, this would imply that we

essay to determine what is the plan of life. Thus we will attempt to define the official duty and purpose which seem legitimate to the several vital properties.

The distinction of purpose, and often correlation of duty in illustration of certain facts, will afford valid reason for more or less of partial repetition.

Sensibility. — This term seems to express legitimately certain abilities as a vital property of life, — as a part of the grand whole, which is fulfilled through the brain function as intelligence and reason, — comprised in all the variety of purpose to which conscious intelligence becomes applicable. And we further define this vital property, Sensibility, as possessed of perceptive abilities which afford the possibility to recognize things, conditions, and relations, both near in contact and external to and beyond contact; that is, at *all distances*, in quite significant distinction to the vital property Sensation. While this

vital property includes a part of the recognized abilities called special sense, such special departments do not contribute to our purpose with such degree of usefulness as to make it important to further enlarge the fulfilment of duty implied in such property.

Sensation. — Sensation is a vital property of great significance with our subject; and so unlike Sensibility, that more than a brief mention is required to do justice to the many problems of which it becomes a part.

Sensation is expressed through a nerve ability, which is without consciousness or intelligence, and can recognize only by *immediate contact at insensible distances*.

Remember the mentioned distance of measured distinction in the applied fulfilment of function, with the two mentioned vital properties.

Sensation may be a condition of pleasure, irritability, or pain. The vital property sensation may express a sensation normal or

abnormal; the latter always precedes active disease.

Irritability is not a different vital property, as some writers have proclaimed, but a sensation disagreeable, which may relate to sensation direct, and to sensibility indirect.

Sensibility has a consciousness of what the sensation may be; while sensation is blind and unconscious of the realm of a possible sensibility.

These two vital properties have each great significance of purpose, quite distinct to be thought about in a great variety of relations; yet so related that we are often required simultaneously to consider them jointly in the affairs of life. The term "senses," which becomes applicable to the field of sensibility, cannot be substituted, and used legitimately in modification of the vital property sensation.

This may seem like hair-splitting theory; but, if language is entitled to any specific meaning in its application to inorganic

science, it seems equally important to be thus consistent in its application to a far superior department of science.

Theory has long been in disrepute, more because it has been so frequently in error, rather than out of place as a method applicable to a more correct aid to the comprehension of a problem. Scientific research in the problems of organic force requires that special significance shall attach to certain phraseology, otherwise communication could not be profitably exchanged.

In no department of erudition do we find such promiscuous and interchangeable application of terms of special significance as is to be found in the literature of medical science. If the subject of vital properties, as well as other relations in organic nature, are deemed worthy of consideration through special thought, it becomes important that the language to develop correct thought should blend with an approximate correctness to the greatest possible end. It is

not well to treat with too great contempt the importance of equally significant terms, in a science of the highest order, which involves the most delicate and subtle relations that have a bearing on the fulfilment of the plan of life.

Before proceeding to further mention of the vital properties so far considered, it is well briefly to allude to Instinct and Contractility; after which to review what medical literature may have contributed pertaining to the two properties, sensibility and sensation; and then proceed to further consideration of the distinct vital properties in their *co-relation* of duty.

Instinct. — Organic instinct is a vital property of life-ability without reason or intellect, which *presides* over the construction of the organic body, and also is installed commander in chief of the department of *defence*, as executed through the involuntary organic process. This property manifests its

function and purpose in presiding over *all* material which comes within the field of vital jurisdiction.

Nutritive material is used for organic construction, while material not nutritive, and foreign, is directed into the proper channels and eliminated.

The ability of organic fulfilment, which uses certain material for constructive purpose, while other material is ejected, deserves a name as a special organic or vital property. It is not the will power of ability which presides and directs to the use of nutrient, or to the expelling of foreign material; but a decision and fulfilment of duty, which comes from an entirely different source. Therefore, with the human organism it can be truly and significantly said, that Sensibility presides over the *voluntary* life acts, — while Instinct presides over the *involuntary* life acts. This distinction should ever receive due consideration when dealing with the problems of life.

Contractility. — Contractility is that vital property manifested by the contraction and alternate relaxation of muscular fibre, thus producing motion. Sensibility may preside over voluntary contractility, while Instinct presides over involuntary contractility, as illustrated in the heart's action, and more specially in the convulsive struggles subsequent to the presence of strychnia. Thus the vital property Contractility is largely, and in fact wholly, an invisible instrument of motion in the hands of Sensibility and Instinct.

Let us now stop and review most critically the premises and outlined duty we have attached to the several distinct and separate vital properties. Determine whether we have represented an ideal illustration, which may be found in duplicate with facts in organic nature. Determine whether our illustration of the several vital properties becomes susceptible of demonstration and verification in harmony with the known facts, presented

and fulfilled through the instrumentality of organic life as manifested by the human living organism. Determine whether we have drawn the lines of distinction between the separate vital properties in harmony with the facts. Determine whether it is rational, reasonable, and indispensable, in the study of the total aggregate of life's problems, to *make* such division of unlike life functions as the only *possible* method for a consideration in aid of the comprehension of the fulfilment of the duties of life.

If the total of ultimate life expressions, of organic force, are included and become truly represented in the four divisions of vital properties, we then have a basis for an elucidation of numerous problems in organic life. Who says that all problems are not susceptible of explanation on this basis, from which we are enabled to recognize how prominent and co-related *each* department of vital property is in the problem under consideration? It is of the greatest importance

to determine the validity of this representation of the vital properties. Our theory, explanation, and suggestive inference of applied treatment of disease, rest on this foundation. We shall be compelled to fall back for support on this basis of fundamental principles, to give emphasis to the methods of organic execution.

Before proceeding further, let us determine whether or not we have represented correctly the vital properties expressed in human life. We again take up the subject of vital properties, believing that we are all better prepared to consider the literature of record which refers to the first two mentioned. The vital properties Sensibility and Sensation involve such delicate premises of greatest importance, that we trust the reader will indulge us in giving sufficient attention to the subject.

The function of Sensibility is defined in Prof. Robley Dunglison's Medical Dictionary as follows : —

“ *Sensibility*. The faculty of receiving impres-

sions, and having the consciousness of them. Bichat defines it as the property possessed by living bodies of receiving impressions, whether the individual be conscious of them or not. In the former case, where conscious, he calls the sensibility animal; in the latter, where not, he terms it organic. This last is common to vegetables and animals, and presides over nutrition."

It becomes evident that Professor Dunglison adopts the definition of Bichat, by giving it such prominence. This definition seems most exceedingly mixed, although it is the official definition of record. This definition of the vital property Sensibility defines it very imperfectly, and at the same time makes a part of itself the function of Sensation.

The language, "property possessed by living bodies of receiving impressions, whether the individual be conscious of them or not," implies that, when conscious, he calls such *fact* an expression of "animal sensibility"; when not conscious, he calls such *fact* "organic sensibility."

The definition further implies that organic sensibility "is common to vegetables and animals, and presides over nutrition." In fact, this one vital property, Sensibility, is made to fulfil the duties which we have defined as implied in Sensibility, Sensation, and Instinct.

The idea of a property in vegetables being called "organic sensibility" seems crude, to say the least. In this definition we have *no defined line of distinction* between those functions which are executed *consciously* and *unconsciously*. The term "impression" is here used with such expression of agency that it becomes important briefly to consider the true import of its application. Impression, in the sense here used, is not truly expressive of a something done, as the language seems to imply. What is fulfilled as an *event*, which is called an impression, is really no other event than a recognition, or *perception*, either by the sensibility or organic sensation of some new relation or *contact* of material entity.

What is called in medical literature the

making of an *impression* on the human organism is not a something *done* to the organism, but a recognition *by* the organism of some new relation or contact. Such recognition may first take place through or by the consciousness, Sensibility ; or the recognition may in the second place become an *event* of Sensation, and sensibility later becomes conscious of the sensation ; or the recognition may take place with the sensation, and such *fact* may *not* become of conscious knowledge to the sensibility.

In illustration of the latter, we mention such incident as the taking of certain medicines in disguise, without knowledge of such fact until the sensation has developed into degrees of aggravating pain ; after which consciousness becomes aware of the sensation of pain ; but not previously aware of a *contact*, or sensation of mild degree, which had yet failed to develop pain. We will mention a certain kind of contact fact, which has a dual method of becoming a conscious

fact, and which is illustrated by forcing a needle-point into the skin. This *fact* may be known to the sensibility, or consciousness, through the special sense of sight; or such fact may become known through the sensation (pain) thus caused, which sensation *becomes later known* to the sensibility. A second party observing the fact knows of it only through his sensibility; while the party of experience may know such fact through his sensibility directly, and, secondly, indirectly, through the consciousness of the sensation of pain.

Thus all contact relations of recognized perception, which are not observed by the eye, become *conscious* recognitions through the recognition of the *sensation*, rather than the *fact* which caused the sensation. The function of vital property, manifested in life abilities which can recognize a fact at *all* distances, and possessed of intelligence, we call Sensibility, while that vital property of life ability which can recognize a *fact* only

through immediate contact, and is without intelligence, we call Sensation.

It seems to us that the differences of duty in the affairs of life imply such distinction of purpose that we cannot intelligently include them within the limit of one vital property, and do justice to fact and required comprehension.

We quote Professor Dunglison's definition of *Sensation*, which is expressed in the following language: "The consciousness or cognizance by the brain of an impression caused by an external body on the organs of the senses." This definition does not define sensation; it only defines that the brain, or consciousness, is *aware* of the *fact* that there has been a sensation developed. Such sensation is said to have been caused by the contact of some external body "on the organs of the senses"; while the fact is, in place of being necessarily in contact with the organs of the *senses*, — possibly the eye, — such contact might be with the organs of sensation.

In this definition more emphasis is given to the brain ability than any *unlike* ability, which may distinguish sensation from sensibility. While it is true that sensibility may know what the sensation may be, yet consciousness forms no part; sensation can exist when there is no sensibility for a possible recognition.

We have said that contractility was a vital property in the hands of both Sensibility and Instinct. One gives direction to voluntary contractility or motion; the other, to involuntary contractility or motion. Neither the Sensibility nor the Instinct executes the contractility, but either may authorize such activity.

It is *important* to recognize that Sensation is *always* a prior incident of fact, which *precedes* the instinctive order for a *special* execution of Contractility or *involuntary* motion, which co-relation is the ever intervening *compound* fact between cause and effect, — with the cause of disease and effects of

medicine. There is a fact of presence, and a fact of sensation ; while Sensation may or may not precede a *conscious* mandate, which authorizes a voluntary Contractility.

To illustrate the incident fact of a sensation, where it is not possible to involve the brain function Sensibility, we mention that a decapitated frog can be induced to jump by making a sensation irritable with a needle ; while he cannot stop jumping until exhausted, because he has no head, or sensibility, to call a halt.

Professor Dunglison's definitions of Sensibility and Sensation seem each to include the other, to such a degree that no distinct difference is made to appear. The eminent lexicographer, Noah Webster, defines Sensibility : "The quality or condition of being sensible ; capacity to feel or perceive, applied to animal bodies, — as a frozen limb loses its sensibility." The two vital properties of Sensibility and Sensation are thus made to appear as one. The same authority

defines Sensation as “an impression made upon the mind through the medium of the organs of sense,” — which is quite similar to that given by Prof. Dunglison, who defines Instinct: “The action of the living principle, whenever manifestly directing its operations to the health or reproduction of a living frame. The law of instinct is, consequently, the law of the living principle; and instinctive actions are the actions of the living principle. Instinct is natural; reason is acquired.” This definition is substantially correct. This vital property authorizes action, but does not *act* itself. It is more the grand dictator of ceremony, or superintendent.

The question will naturally arise, who shall be acknowledged as authority in this department of definition, whether appointed by popular vote, or determined by ability to discriminate and represent most correctly the precise fulfilment of separate properties in organic nature. We must adhere to our own definitions until otherwise

persuaded, rather than those of record. We base our theory on the outlined definition we have given to the separate vital properties. We are dealing with a department of nature which has been represented and defined so broadly in its phraseology, that it is exceedingly difficult to know what one is really thinking about, while we have a department of such delicate relations of fulfilment that far greater method is required to do justice to its facts than is required in the departments of inorganic force. We are thus required to give specific attention to the proper defining and elucidation of the several vital properties, to enable us to pursue the subject to the end with that consistency of relation which shall fulfil a representation of the nature and law of organic force, in duplicate with facts expressed through the organic life ability.

To further illustrate the undefined thought of the functions of the different vital properties by medical men of eminence, we quote

from an address delivered by Prof. Thomas H. Huxley, before the British Scientific Association : —

“The first proposition that you find definitely and clearly stated by Descartes is one which will sound very familiar to you at the present day. It is the view which he was first, so far as I know, to state, not only definitely, but upon scientific grounds, ‘that the brain is the organ of sensation, of thought, and of emotion.’ If it should happen to a man that by accident his spinal cord is broken, he becomes paralyzed below the point of injury; his limbs would be paralyzed, and they would be insensible. Consciousness, so far as we can have knowledge of it, is entirely abolished below the injury.”

The brain is here made the organ of sensation, and the limbs expressive of consciousness. Such is a common error in medical literature, which is presumed to represent the language of science. It harmonizes with the dictionary requirement, but it does *not* harmonize or blend with the facts of Nature, which such language is presumed

to represent. Should a professor of inorganic science use the terms "attraction of gravitation" and "cohesion" in such interchangeable manner, it would be exceedingly difficult to know what he was talking about. In the department of medical science preciseness of expression is of far more importance, because it involves in many instances very important practical relations of possibility of continued life. In illustration, it becomes important with a view to the conservation of vital energy, in the practice of medicine, to have a common and correct understanding of the meaning and application of language. Science requires a preciseness which shall contribute to our comprehension a positive idea, whether in administering a medicine we are transferring supplementary energy, or engaged in guiding the vital energy in the most possible economic manner. Without a clear, correct, and well defined idea of the true import of the separate vital properties, no one can have a distinct comprehension

of the principles of a medical science. Without a knowledge of such principles and their application, no one is qualified to take the best advantage of the possibilities provided for the practice of a medical science. Such is true with other sciences, and why not true with the department of organic science?

We will now return to a brief consideration in outline of what is implied in the fulfilment of co-operative methods of vital agency, in the more general application of the combined special properties, as a practical activity in direction of organic duty.

In the execution of the plan of organic life as based on the four vital properties, Sensibility is held responsible for the presence of *kind* and *quantity* of material which may come within contact relations with the domain of organic life, waiving accidents and uncontrollable circumstances, thus getting to the end of voluntary relations, which it seems important to consider further under a special head. Now, in default of properly applied

sensibility, there exists a compensating ability in the name of *Instinct*, which will appear more prominent at a later period, which will direct application to the disposal of *all* such material that may be already out of the field of direct aid through sensibility, and wholly within the field of instinctive jurisdiction. Thus the usable material for organic constructive purpose — all relations being normally in balance — is conducted through the progressive changes of assimilation to become a part of the endowed life structure, and the surplus nutrient material is expelled. Moreover, that material not nutritive, and not of possible use for organic constructive purpose, is taken in charge by instinct, with an applied activity to the process of elimination or expulsion, either in a manner common to ordinary elimination, or a vital expression of *special* resentment.

All instinctive actions are either physiological or pathological, — one department relating to usable material, the other to non-

usable. Not only does instinct attempt to correct the errors and omissions of sensibility, together with the many unavoidable transgressions, — which may frequently be accomplished, illustrating what is called Nature's remedial process, or *vis medicatrix naturæ*, — but again in many instances when instinct comes to such relief, the instinct *fails* to proceed in harmony with economic vital expenditure and structural safety, thus instituting activities which become dangerous to life, requiring to be diverted or retarded by means devised by sensibility, through medical relations. Thus, when pathological vital action has been *successful* in removing said non-usable material without interference from sensibility, such feat is recognized as an exhibition of *vis medicatrix naturæ*. But when said pathological vital action does *not* make a safe success of removal without the aid of medical relation, the pathological action is recognized as disease. Pathological vital action is disease. There are no other actions

of the living organism except physiological, pathological, and voluntary.

The cause and continuance of disease may be from material introduced from without, or material obnoxious resulting from previous pathological action, or chemical product. The nature of disease in general is implied in the general function of pathological vital action. The nature of *special* disease is the nature of the special pathological vital action under consideration.

Instinct presides over *all* material within the vital jurisdiction. Thus the law of instinct is the law of the living principle acting physiologically in relation to nutritive material for constructive purpose. Also the law of instinct is the law of the living principle acting pathologically in relation to material non-usable, or not of possible use for constructive purpose. Organic continuance requires that such material be removed. Instinct is without reason, and is a willing worker.

We must recognize that instinct corrects some of the errors of sensibility in the removal of non-usable material ; while sensibility must quite frequently, in conditions of disease, come to the rescue of instinct and guide to more desirable results. Thus Nature has provided a double compensating ability in relation to vital process, whereby each of the two vital properties Sensibility and Instinct may give aid to the practical incompleteness of the other.

The vital property represented through sensibility contributes aid to organic construction by the supply of nutritive material. Sensibility may erroneously, carelessly, or accidentally contribute material of no use, and obnoxious. In such instance instinct, presiding over such presence, sets the organic machinery into activity to eliminate such material. Success may be of early event, or prolonged, and receive the name of "disease"; or the organism may die from exhaustion of vital energy, or injury to struc-

ture from such struggle. The function of Sensation becomes instrumental in conveying the fact of *all* material presence to the commander in chief, Instinct, which, acting as a board of decision, determines what shall be done with said material. Thus Sensibility contributes supply of material; Instinct builds the organic body, and keeps it in repair through the aid of involuntary contractility, which is pressed into service in connection with other process. When constructed, this organic body as a whole becomes an *engine* of *activity* under the control of sensibility, which property becomes operative of voluntary contractility.

Returning to the subject of pathological vital action,—the action of instinct,—we may remark that it is the duty of sensibility to have a watchful oversight of instinct in the affairs of disease. If Instinct is doing the best which circumstances permit with the least danger to the organic system, it becomes the duty of Sensibility to withhold

interference, and let properly directed instinct work out the cure; otherwise, guide with appropriate appliance to the best possible result.

Thus, dependent on the fact that instinct is not a department of reason, those premises are provided in Nature which make it necessary there shall be a medical profession of special scientific culture in the department of organic force. While we recognize that certain material may become a *cause* for pathological vital action, or disease, we must recognize also that material medicine becomes a cause for pathological vital action. Thus, when pathological vital action, which we call disease, is being manifested in a direction we wish to change or modify, we use a certain medicine which has been determined by experiment to become a *cause* for pathological vital action to be modified or differently expressed. In place of medicine *acting* and having "active properties," medicine does *not* act; its presence only becomes

a *cause* for a vital act. Consequently medicine has no "active properties." What is called medical action is no more or less than pathological vital action. The *modus operandi* of medicine consists in *no other* phenomena than pathological vital action.

The man of practice may inquire, "Of what profit is this argumentative distinction? We are seeking results." If the practice is right, why not have the philosophy, or theory, right? It is certainly more commendable to intellectual pursuit, in matters of science, to have language, thought, and fact in unison. But we will again take up this subject later.

We must not ignore the practical fact that pathological vital action is an expenditure of vital energy. Said Professor Clark of the New York College of Physicians and Surgeons, "Every dose of medicine diminishes the vitality of the patient." Said the venerable Prof. James M. Smith, M. D., "Drugs do not cure diseases; diseases are cured by the *vis medicatrix nature*."

Vis medicatrix naturæ is pathological vital action, and pathological vital action expels the *cause* of disease. And this *action*, while *removing* the cause of disease, is *called* the disease. Pathological vital action is disease. Thus when *vis medicatrix naturæ*, or pathological vital action, executes the removal of the *cause*, the action called disease stops, and the active disease has vanished. As one writer has without thought remarked, the "disease has gone to seek other victims."

This may be the place to call attention to the general mention in medical literature of "the active cause of disease." The term "active cause" is not of compound relation. There can be no "active cause." The cause of disease may be certain material; and when said material gets within the limits of vital jurisdiction, a special vital act is expressed in relation to said material. The cause may be dead material, while the "active" is a function of the living organism. The cause of disease does not *act*; it is *only* cause. Dis-

ease does not migrate; it is only the *cause* of disease that travels. "Active cause of disease" and "active medical property" are twins, whose father is named "delusion." The property sensation, or organic perception, may communicate a *fact* of material presence to instinct, which is responded to by an activity of significant violence; which activity, as an activity *only*, becomes the *first* evidence to the sensibility that wrong material relations exist within the domain of organic life. Such fact is illustrated when strychnia has been unconsciously introduced within the vital premises; also, with various causes of disease.

Thus there may be a sensation to which instinct responds with such degree of involuntary convulsion, through the active property contractility, as to exhaust vital energy unto death. In many cases sensibility can adopt measures to modify instinctive activity. When sensibility cannot thus interpose, instinct holds first place, and may

inspire activities which exhaust all vital energy. Sensation may have its relations with sensibility, while at other times sensation is in close communion with instinct; or both may at the same time be involved in the affairs of life.

In illustration of the application of thought — not practice — to the disease problem from the basis of vital properties, we have to consider the *cause*, and of what degree of possible sensation, of irritability, such cause may produce; also what activities will be developed by instinct, and what sensibility may be required to effect, in guiding such activity; also how such modification can best be accomplished with the *least* possible expenditure of vital energy. This last consideration is of greatest importance. Life is quite too frequently sacrificed from improper appliance. Medical practice is not a supply of supplementary energy, but quite the opposite. In the choice of measures used there are premises for the exhibition of skill, — which makes a

knowledge of the law of the "living principle" an indispensable accomplishment. Legitimate medical practice does not consist in silencing pathological vital action in all cases. Pathological vital action is for a purpose, and it is important that we comprehend its purpose, and render aid to its desired accomplishment of purpose.

We will now call attention briefly to some of the general laws of applied vital energy.

We have a broad and very intricate future in detail of the various relations which our premises suggest, with the many problems of disease and medicinal relations, of which but little mention is of profit at this time. The more definite outlined plan is of more immediate importance.

DEPARTMENT OF ORGANIC LAW.

THE first general law of organic vital purpose is implied in the constructive duty comprised in the transforming of food material into living organic structure, and the elimination or expelling of the worn out tissue of dead material. Such acts are physiological vital activities, in relation to food material in certain quantities. This department is treated quite exhaustively to the minutest of detail in the text-books on physiology, and requires little or no mention. Food material in large quantities cannot always be used for physiological purpose; and pathological vital action may come to the rescue, and expel by *special* process the surplus quantity. Thus both physiological and pathological vital action may relate to food mate-

rial, while physiological vital action *cannot* be expressed in relation to material which is foreign, or not possible of assimilation. All *special* vital action in relation to material *not* assimilable is pathological. No other line of distinction can rationally be inferred.

The second law of vital purpose is implied in a pathological vital activity manifested in relation to material *not* possible of assimilation, or usable for purposes of organic construction. This law of vital purpose and applied ability is required to correct to a limited extent certain material relations within the domain and field of organic life, which instinct superintends. This department could be quite appropriately called the army and navy, or powers active, not for constructive purpose, but powers for defence, which execute the duties of throwing out of the organic citadel that material which has no legitimate right of occupancy, and whose presence interferes with the functions and

duties of harmonious organic life. The instinct presiding has complete supervision of both material for constructive purpose, and expulsion of material not possible of assimilation.

If no such function of life ability became a part of our being, in a brief time we should become so mechanically obstructed that organic life functions would cease to continue. The total included in detail of such variety of application of *pathological* vital action would be sufficient for volumes far more extensive than is found in the text-books of physiology. Our text-books give but little space to pathological vital action, but very much is recorded of what is called pathological anatomy, or product of pathological vital action, together with description of *appearances* of pathological action. In fact, pathological action is disease; and such phenomena may produce morbid anatomy, or may not.

Those disturbances called disease furnish a great field of phenomena for the study of

the law of pathological vital action. No one can define the difference between the so called "action of poisons," in disease, and "active medical property," in distinction from pathological vital action. There is no difference. All of the former terms are misnomers, while the latter is the real and true expression of the *principle* involved. The belief in a medical power, or "active medical property," gives wrong direction to research in aid of the principles and problems of a medical science, while in the department of pathological vital action is found that law and principle of organic activity exceedingly more useful to the physician than the department of physiology. The former quite frequently needs a physician of superior sensibility to superintend with intelligent watchfulness that department of instinct which is urging to activity those pathological feats called disease, while physiological vital actions with a patient have little use for a physician. Thus is it with pathological vital

action, or disease, which is inspired by instinct, and often requires the interference of sensibility to guide it, and of which much would be required to complete a course on theory and practice.

There yet remain other premises to consider, which have not appeared, and which speak volumes in support of a manifest wisdom in behalf of a *one* more resource which has been provided to enable us to have a *one* more chance for a possible continuance of extended life. Thus we introduce and let the thought come up, by asking the following question :—

Provided that instinct is really running riot with pathological vital action to the exhaustion or end of the fund of life, even unto death, and no sensibility is available or possible to make application to divert or otherwise deploy this morbid vital activity into lesser dangerous relations,—is there, we ask, a *one* more provision in Nature for a forlorn hope to be found in the provisions of instinct,

to *compensate* for what sensibility *cannot* do to delay the immediate prospective fatality thus directed, *by* instinct? To this question the reply is, Yes. Instinct has a *special* quality, or ability, to meet such emergency in many instances. Such is found under the head, or in that division, we shall call the third division of general law, applied to the self-preservation of the organic body.

The third general law of application is more an ability to stop instinctive activity than otherwise. It is a modification of pathological activity into a silence, or suspension, of active measures. This vital purpose of modified instinct fulfils such an important relation, that we are required to consider this department in a division separate, implied in a third law of vital purpose in aid of self-preservation. It is a silence, or *toleration*, for a purpose; and that purpose is self-preservation. It is expressive of a measure involving important wisdom in the plan of life.

This third division seems to be implied in a *toleration*; that is, certain activities have been occasioned from a certain *cause*, and while the cause may yet remain, the activity has ceased. Or, in other words, instinct has ceased to inspire with activity after a *period*, — that activity which was early inaugurated from causes which yet continue to remain. Thus the morbid activity which has a sufficient *cause* to be perpetuated unto exhaustion becomes in many instances suspended, and the presence of the remaining cause is tolerated without special activity in relation thereto, — thus husbanding the vital fund, and giving a longer lease to life. This feature and fact of presentment belongs to the department of instinct. It is instinct in a special direction. It does not apply in all cases, — far from it; but it does apply in many cases.

This principle, or toleration, of *cause* without *activity*, is of frequent incident, and is well illustrated in the fact that a child residing in a miasmatic region, or in the filth of a

city, may escape *active* disturbance of disease; while a child from a rural district brought into such relations might be taken suddenly sick. The same principle seems to be implied and illustrated in Pasteur's method, so far as it becomes a fact of protection from primary cause. When medicine, as the physicians sometimes say, has ceased to *act*, or exhibit "active principles," such fact is due to this principle of toleration.

We remember on a certain occasion of being present when a Professor of Materia Medica had for his lecture before the class the subject of "Ergot and its Powers." While on the premises we made the following note of language used:—

"The same preparation of ergot often acts finely for a period, but may lose its power, or it certainly seems to, although the bottle has remained corked and properly cared for; and how that power escaped, or why it ceased to act, is a problem which will wait till medical science can explore deeper those mysteries which surround us."

The fulfilment of this principle of toleration becomes the intervening condition which preserves the life in some acute and self-limited disease. In fact, it is the principle in Nature which makes it possible that certain disease may be self-limited, and also has much to do in determining the duration of other acute disease. Indeed, in very many instances, it is the condition to be artificially induced by the physician, rather than to deploy vital activity in a different direction,—to husband the vital energies, or modify dangerous activity, which is so frequently accomplished with sedative medicine. It is the principle involved in the interim of relapse in many cases of febrile disease, as well as the *existing* condition in many cases of protracted convalescence, and modified phenomena of disease.

From the foregoing premises, implying the nature of vital power, or organic force, of separate special vital properties, and their co-relations to purpose, together with the

three departments for the exhibition of applied law of organic method, we have a plan of life implying fundamental principles for the development of the doctrinal subject of a theory and practice of medical science.

Chronic disease is very frequently due to a presentation of *cause*, in small quantity and of continuous application, — many times of such small quantity that little or no *special* disturbance is noticeable, — while a condition of toleration develops in relation to such presence, to that degree that such material may exist in quantity sufficient to be the cause of special disturbance of great magnitude, with one whose system had not thus become tolerant; yet, with the one tolerant, we fail to recognize much trouble of apparent importance, until serious organic complications are developed. Such may be illustrated in the sequela of malarial poison and organic disease due to the use of spirituous liquors.

Malignant growth is always preceded by an abnormal sensation, and frequently of

conscious existence. It becomes important many times that we attach proper significance to continued abnormal sensation; while a better knowledge of histology is obtained through a study of the law of development, than from results of the law; also, a more effective treatment may have a reasonable expectancy.

In such incident we recognize that there has been sufficient *abnormal sensation* to pervert the development of organic structure; yet the sensibility of the individual of experience was conscious of but little degree of abnormal sensation, until serious conditions were made to prevail. Again, such incident illustrates that reason may be far superior to experience. Under the *law*, reason may and can have good cause to anticipate such event, while experience comes too late to be of great value to the person of experiment, who long presumed that such material agreed with his constitution.

It is not to be implied that the brief men-

tion that pathological vital action is disease does justice to the subject of disease. Such statement only puts certain facts and actions in a true relation, while there remain many complex facts which require a far more extended consideration. Disease is an organic condition, in which physiological vital action is more or less imperfectly executed, while pathological vital action is being *especially* active in a more or less variety of relations, that would require a complete treatise on special disease to do it justice.

The germ theory of disease as presented is an incomplete aggregation of ideas of fractional relation, to which we shall again refer later.

The first duties of instinctive supervision are implied in the oversight given to nutritive material in the process of organic construction, which constitutes the *life* work of this department of applied function for the perpetuation of organic life.

The second division of *duty*, executed through instinct, consists in directing *special* activities in relation to material or conditions which are not of normal relation. Sensation recognizes and communicates the *fact* to instinct, which authorizes activities executed by contractility. Now the presentment thus implied is precisely what is presented and expressed in medical literature as the "making of an impression on the organism, which is responded to by a reaction." Such incident of phenomena is not a "reaction," but a first action, in response to a sensation, rather than a *previous* action.

Foreign material of objectionable quality within the citadel of life is generally recognized in medical literature as an *agent* which has *done* something, and such application is also made to medicinal relations. The medicine is made an *agent* which does something, an agent which *acts*, an agent expressive of power or "active medical property," which is said to make an "impression," which is

responded to by "reaction." In medical literature, if no response becomes expressive from such relation, this *agent* is presumed to have lost its power, or become inert. We cannot escape the inference that in the affairs of life, *executed* by organic force, medical science of acceptance has given but *little credit* to the organic ability, except in the performance of physiological duties. And with this department discovery is fast superseding Nature in recognizing that many "active properties," or powers, exist in drugs which *execute* physiological action. In fact, many students of medical science are experimenting with drugs with a view to discover such ability; and great success has been reported.

The grand strides in scientific research seem destined to reveal possibilities which will allow the physician to dispense entirely with organic force. It is becoming the aim of the alleged foremost journals, in keeping abreast with the times, to give particular

attention to the "physiological action of old and new remedies," while leaders in schools of medical instruction have made "some new observations on the physiological action of the mercurials," — thus illustrating that in no age, and with no department of scientific research, has the human mind given such exhibit of serious delusion as we find in the literature of alleged contribution to medical science. What vagaries of thought are yet destined to become adopted is a serious department to contemplate when brought into relations of experimental procedure with the fund of life.

Reasoning about such premises from the basis of experiment and *appearances*, without established *law*, is quite like the early reasoning about astronomy from appearances. While great credit is scored for such achievement, there is a boast of "exact science of practical value *not* to be regarded in the light of a beautiful but useless theory." An accepted state of intellectual scientific pursuit

which ignores the use of theory, or comprehension of the nature of cause and effect, may do for a novelist, but is a sad and lamentable infliction when made applicable to an invalid existence.

Physiological *action* is a phenomenon of organic force acting in relation to *nutrient* material for constructive purpose, or the elimination of such material later. Said Professor Gregory of Edinburgh, "Medical doctrines are for the most part stark, staring nonsense." Said Dr. Bostock, author of a History of Medicine: "Our actual information or knowledge of disease does not increase in proportion to our experimental practice. Every dose of medicine given is a blind experiment upon the vitality of the patient."

Of that department which we allege to be executed by pathological vital activity, accepted medical doctrine has given credit quite largely to an ability or agency of "active property" belonging to dead material, or

more frequently to material which never even had life. Such is the only *inference* of the language. Such a plan seems crude, to say the least, of thus endowing ability, although such is the *plan* of *accepted philosophy*, and it has long appeared to afford general satisfaction. Whether such philosophy will be surrendered with a less reluctance than the doctrines of pre-Copernican acceptance, will be determined later. The human mind gets into channels, and thought is the result of an education, which might be made as easy to be right as wrong, and *vice versa*. Some can escape from the convictions of a first education, while others cannot. Says Herbert Spencer: "In my earlier days I made the foolish supposition that conclusive proofs would change beliefs; but experience has long since dissipated my faith in men's rationality." The question may arise later, whether we owe more allegiance to the preservation of educational dignity than to the preservation of the laity.

In the enigma of life it seems that there exist *four vital properties* of organic force, and that Sensibility may direct voluntary motion, while Instinct directs the involuntary; that Contractility executes motion, while Sensation executes the function or perception of immediate material contact, relative to which instinct may find cause to direct a special involuntary activity, and sensibility find cause to direct voluntary activity relative to the conscious sensation. All these qualities of vital ability have special significance in the affairs of life; and while we cannot escape the recognition of such separate unlike functions, we cannot get behind to a "more previous," but we must begin with such knowledge.

It may not appear wise, safe, or prudent for instinct to inaugurate such activities as frequently become manifest; but we must keep in mind that instinct is not intellect; and while instinct may often appear to direct very unwisely, this department can and does

direct actions which practically become wise in their achievement of purpose. The ability given to instinct is an ability that within itself cannot exercise discrimination. It is an ability that may do practically right, or may do practically wrong. Yet no one can but admire the grand plan of life, of which it would be extremely difficult to suggest improvement, — wherein is included the fact that *instinct* corrects some errors of sensibility, and executes a great variety of pathological feats without *aid* from sensibility ; yet in emergency sensibility superintends instinct, and directs more safely its applied measures in support of organic preservation. Thus we have in the several distinct vital properties a complete whole, which is wonderful to contemplate in support of expressed wisdom emanating from the laboratory of the Great Architect. It becomes emphatically suggestive that no department of erudition can equal in its achievements such reward to mental industry in fulfilment of scientific

accomplishments, applicable to the practice of medicine most beneficially, as is revealed through a knowledge of the several vital properties and laws of organic activity.

Before closing this chapter, we desire to mention, in connection with a *first cause* for a pathological vital action, the possibility of a development of *secondary* causes that may further contribute to aggravation of *abnormal* sensation and subsequent pathological action. Such secondary cause can be made to exist with a condition of abnormal heat, in association with the primary cause. Increased temperature may be in partnership with joint total cause, in relation to which instinct directs a larger influx of blood, thus developing what is called *inflammation*, it may be to a local point, or an organ, perhaps the lungs. Associated with all acute disease, pathological vital action develops more or less increased temperature of the blood, which in itself becomes an addition, and a *secondary*

cause of frequent serious importance, that requires watchful attention. In the treatment of disease, too little attention to such cause becomes a dereliction of duty difficult to excuse.

We now trust that the primary premises have been sufficiently outlined to make application or illustration of the vital theory, as expressed in the phenomena of special disease.

ERUPTIVE FEVERS.

WHEN we take into account what is required to be accomplished in a variety of eruptive febrile disease, — namely, the elimination of an increased total of dis-integrated tissue and developed poisonous pathological product, together with the fact that the skin is the great eliminating organ of such tissue and product, and the outlet of greatest safety, — we are confronted with a mechanical fact which militates against such possibility to a dangerous degree. The instinctive effort to eliminate through the skin sends such a volume of blood into the capillaries, that sufficient pressure is made on the millions of pores to collapse them so as mechanically to shut the door to all possibility of escape. The increased *heat* in the skin in

contact with the numerous nerve extremities becomes the abnormal fact recognized in *irritable sensation* as a cause secondary, to which instinct responds with persistent determination of blood, thus closing the numerous emunctories against escape of the deleterious material so important to be expelled. Thus *heat alone* may be the *cause* of death in the early stage of eruptive fevers. The death line is just beyond a certain degree of heat, which is not the same with each person.

Now, the practical problem comes up,—and how explainable?—How shall we open the million of pores, or how shall we prevent death from *heat early*, and how shall we prevent death *later*, from the cause of a too great quantity of obnoxious material? What fulfils one purpose also fulfils the other.

But how shall we reduce the temperature? Before we proceed to make reply, let us consider the method—which, we regret to say, is quite too often adopted—of giving hot

drinks, and supplying artificial heat to make the patient "sweat," as such method is explained. The *fact* that extreme *heat* already present from organic method prevents indirectly the possibility to "sweat," fails to be recognized with due consideration. To induce perspiration, or opening of the pores, the mechanical problem, or fact, requires that we reduce the superficial volume of capillary fulness. To accomplish such purpose we must reduce the temperature. Shall we reduce the temperature by loading the organism down with such kind of medicine that *vital* activity *cannot act* sufficiently to develop heat, thus placing our selected remedy outside our reach and control, and at the same time adding *more* material for further subsequent tax on vital ability to remove? Such would not be an exhibition of conservation of vital energy, but quite similar to balancing a bag of corn on a horse's back by placing a stone in the opposite end. Such is not to be advised when

better methods may become practical. If possible, we should adopt such a method to reduce temperature as would *occasion* the instinctive action to fulfil the best purpose with the least expenditure of vital energy. Our method should be as much as possible under our immediate control, with a view to conservation of vital energy and immediate modification. It has long been our practice, with a view to reduce superficial temperature, and thus diminish the *cause* which contributes to capillary congestion, — particularly with delayed exanthemata in both scarlatina and rubeola, attended with rapid pulse and high temperature, — to put the patient in a wet sheet pack, give an abundance of cold water, and open the windows, — most decidedly to be adopted in cases of severity. Such treatment is accepted by the patient with feelings expressive of gratitude, and is soon followed by the desired result, although the attendants are liable to anticipate great danger.

Custom has long been permitted to dictate methods, rather than the safer and more effectual means suggested through the principles of an applied science. So important is this treatment as a life-saving method from early death often times, that we desire to give special emphasis to such consideration.¹

It is not essential that extreme *cold* applications be used; the wet sheet of agreeable temperature becomes a sufficient conductor of heat when changed frequently, and not applied with such long continuance as to be productive of retained heat. With scarlatina, the keeping of the superficial heat diminished *early*, with such reduced volume of capillaries that the pores will *remain open* to allow the early and continuous escape of the accumulating poisonous product, will be of great advantage as a prophylactic against glandular swellings and inflammation of the throat. The soluble products of pathological action

¹ Read what is said on the treatment of scarlatina in Naphey's "Medical Therapeutics."

become *secondary causes* for continued disease of more or less severity, and of blood poison, which should ever be accommodated with a door for escape. Avoid cathartics, and hold bits of ice in the mouth to protect mucous membranes.

We have sometimes thought that medical practice was conducted too much with a view to paralyze or suppress vital activity, rather than the keeping of such *activity* in relations which could best execute the cure, — thus becoming instrumental in retaining the existing *cause*, protracting convalescence, and development later of chronic invalidism. Said Professor Barker, of the New York Medical College, some years ago : “ The drugs which are administered for the cure of scarlet fever and measles kill far more than those diseases do.” A practice of medicine should be based on the *solved* problem of the nature of organic force implied in the nature of the particular disease, — what is required to be done, and how it can best be accomplished with the

least expenditure of vital energy. To give medicine without a clear idea of the nature of the problem too frequently becomes of serious detriment to the patient. It frequently becomes a duty of greater importance indefinitely to postpone medical treatment rather than make such appliance. Seek to comprehend what is required, and *how* the organism can best accomplish such purpose, — remembering that it is the *vital energy* which executes all the doing, and that medicine never *acts*, but becomes *cause only* to *modify* vital acts.

PNEUMONIA.

FURTHER to illustrate the application of a theory which in *our* opinion is entitled to respect, in being consistent with cause and effect and phenomena, — also with method of treatment and results, — we will make application of it to the disease of pneumonia. We must consider the *cause* ; what becomes consequent to such cause, and how expressed ; how the cause may become multiplied ; how the cause may be diminished by treatment ; how life may be prolonged to an existing condition of instinctive toleration of surroundings, — together with the display and verification of the function of the several vital properties involved.

Starting from the basis of the several defined vital properties, we recognize that the

phenomena of *activity* is in fulfilment of special action, *directed* by instinct. For the exhibition of a special activity there must be, or exist, some *special cause*; there must always in conditions of disease exist a previous *abnormal sensation*. This sensation may or may not be of conscious recognition. The *first* new *fact*, or vital condition, which precedes the ushering in of disease, must exist in an *abnormal* sensation. Disease cannot be made to exist without a previous primary *abnormal* sensation. Such sensation may be *caused* by a great variety of material contact, mechanical pressure on nerve extremity, heat or cold. The elimination of certain poisonous soluble products of pathological vital action of previous disease through the lungs may become a cause of abnormal sensation to the nerves of lung tissue. In the name of *cause* for pneumonia there must exist in the region of lung tissue, with nerve extremity, either a material cause — condition of heat or cold — or mechanical pressure

on nerve tissue, from distended lung capillaries. With some one or more of such existing facts there is a *cause*, which becomes recognized in the name of sensation, — a sensation abnormal, which sensation is a *fact*, requiring instinctive attention, and is responded to by the sending of a greater volume of blood to the region of abnormal sensation, developing inflammation.

We will now consider *each* of the primal causes which *may* contribute to abnormal sensation and development of such inflammation, or pneumonia.

The *material* cause may be from some sudden inhalation of material dust or vapor. The *primal* heat cause might be the inhaling of hot air. The *cold* cause might exist from long breathing of very cold air. The *mechanical* cause can be made to exist from a prolonged superficial chill, producing a diminished capillary circulation, which compels the blood to be stored away with a greater distention of the blood-vessels of the internal

organs,—the lungs receiving an unnatural quantity, together with the fact that nerve tissue of sensation is generously supplied to lung tissue: with this fact of nerve, and of blood *pressure* on such nerve, there may exist an *abnormal* sensation,—on precisely the same principle that applies with pressure of blood in the head as a frequent cause of headache.

Having established a *cause* for abnormal sensation, in response to which instinct sends an increased volume of blood, we are to consider that such increased volume of blood *contributes* to the multiplication of *cause*, producing greater mechanical pressure, developing more *heat*, which becomes a dual and secondary cause for a sensation abnormal to a degree of possible pain. Thus we have now to consider pressure, heat, and developed pain as cause and fact of sensation abnormal, to which instinct makes response by *keeping up* too great a volume of blood to the organ,—all of which associated facts of

organic condition are called in the aggregate *inflammation*.

In accordance with the theory of separate vital property, we are enabled to comprehend how this condition has been made to exist. Now arises the question, When will such disturbance cease; and through what *principle* in the nature of organic method can such disturbance be made to stop?

Pneumonia is called a self-limited disease. The *limit* of such *activity* is governed by that principle we have associated with instinct, mentioned in the *third* law of method in the name of *Toleration*, which implies that *cause* for morbid activity may exist. Yet a toleration is expressed through instinct which permits such *cause* to remain without *special* expression of further activity. Thus through the nature and possibility of modified property of instinct we find the *principle* of organic method which makes it possible that disease may be self-limited. Otherwise persistent activity would continue to exhaustion and death.

With pneumonia, we have to consider whether the *severity* of activity and *territory* involved will destroy the lung tissue, or diminish the breathing capacity sufficient to cause death, before *toleration* and *resolve* to do so no more is established. While this principle of toleration is always developed in pneumonia if the patient lives, it is seldom developed in chronic lung trouble. In many cases of pneumonia, the severity of action and amount of territory involved are not of a degree or of a quantity sufficient to cause particular anxiety. With such cases it is said that resolution succeeds early, and Nature perfects the cure. It should be taken into explanation of such fact, that toleration was thus early established from a milder degree of cause, together with an organism possessed of less tendency to become irritable.

In the treatment of pneumonia, we have three distinct matters to consider; namely, the severity of action, the amount of territory involved, and nutritive support. From

the fact that active phenomena are developed of more or less severity from *several* causes, it becomes rational that the treatment should ever be to diminish *each* of the several causes under our control. Existing heat of high temperature being contributory of much cause, we should seek to diminish such temperature, which is very largely under our control, and a *cause* quite largely existing in the early stages of pneumonia. How shall we accomplish such purpose to best advantage, with a superintendence which admits of momentary modification, as the facts may seem to require? We have adopted the method of early, *very* early, enveloping the chest completely around the body with *cool* wet towels, covered with dry ones, changing these perhaps every twenty minutes for twelve hours, if necessary, together with all the *cool water* which the patient may desire, or even more. When we have found a temperature early of 104° to 106° , such treatment has reduced the temperature to 100° or 102° , thus mitigat-

ing the degree of cause, and converting a case of prospective active severity to milder and safer relations of cause and activity. While it is not desirable to reduce the temperature to a normal standard, it is most desirable and beneficial to keep the temperature within safer limits. The German system of *cold* compress and *cold* bath went most deservedly into disrepute, largely because such application was used with a view to abort or *cure* pneumonia, rather than the keeping of the temperature a few degrees less. It was practised more as a routine plan, without regard to the difference of constitutional strength or age of patients. To paralyze vital activity with cold is equally reprehensible as with medicine. To *abort* pneumonia by depressing the vital activity after certain local changes have developed becomes dangerous. The nature of pneumonia with the robust suggests that continuous efforts to lessen the temperature a *few* degrees through means under immediate control are of sig-

nificant importance, — thus diminishing the blood volume, and permitting more air space to be utilized. Too much emphasis cannot be given to such *early* appliance.

There is very much that might be said of pneumonia, existing with the feeble; our remarks, however, are more directly applicable to the sthenic form, which snuffs out the life of the healthy and active. When we *recognize* the full meaning and position of *abnormal* sensation, as the existing condition which contributes to more serious aggravation of pneumonia, the subject of *cause* of abnormal sensation will be attended to *early*, with a recognition of great significance. The term “catching cold” is quite too often a misleading term. The sufferer is far less liable to injury from continued *cold* than from increased and continued *heat* by organic process, which should be early diminished. In pneumonia, water not only aids in the cooling of the blood, but is required to remove soluble pathological product at an early day.

Water is a large factor of the organic working capital in disease; and even too much water is less injurious and more easily eliminated than too much medicine, which possibly may have no beneficial relation in aid of organic process.

In all disease we should conform and contribute aid to the prudent ways of instinct, rather than endeavor to coerce instinct to conform to the erroneous judgment of sensibility. With all disease, among the indications to be recognized may be included the diminution of all possible cause for abnormal sensation. The *heat* cause in acute disease becomes a factor of great complication, and requires early and continued attention. The severity of disturbance is best determined by the temperature of the blood; and while it is important to reduce the temperature, which is *one* of the causes for continued morbid action, we may soon find a sensation developed to a degree of *pain* that becomes *additional* cause for fur-

ther morbid activity. Thus, in many cases, it becomes very important that large doses of repeated opiates be used early, not only to relieve the immediate pain cause, but to aid in establishing partial toleration, or abrogation. The treatment of the first two days may accomplish much, in converting a case of prospective severity into one of far less degree. Mildness of activity develops toleration earlier, because there is less to tolerate; thus "resolution" to cease activity becomes more early established in aid of self-preservation.

The principle in operative prophylactics with disease becomes possible through three different relations with sensation. Recognizing that *abnormal* sensation precedes *active* disease, it often becomes important to direct attention to abnormal sensation. Nature meets such requirement frequently by establishing a toleration of the presence of cause; while sensibility may appeal to abnormal sensation through a supply of material of more

or less quantity, which presence may favor a condition of more or less temporary abrogation of the function of sensation. With such a presence, sensation cannot perceive or recognize even to a degree of normal perception, much less to a complete fulness of abnormal degree. This condition is made to prevail through the presence of the opiate family of material medicines. The third department is made to apply by a *pre-occupancy* of sensation; while the diverting of *activity* through a *cause* for a different sensation is a resource to be made applicable in various diseases, which become suggestive through a familiarity with the functions of the separate vital properties, and their co-operative relations with the executive problems in life.

This explanation of pneumonia and its treatment is suggested through and in harmony with the theory of vital properties, in fulfilment of special duty in the organic problem, involved with relations of cause and

effect both in development of the disease and in establishing resolution or toleration, implied in support of the principle which permits such disease to be self-limited. So far as we are able to make comparison, theory and fact in association with defined vital properties, together with all the phenomena observable in pneumonia, appear to be verified in the problem we have had under consideration. If we have failed to see all there is in this problem, or given wrong interpretation to fact, we earnestly desire to be set right. Our wish has long existed to be correct with the interpretation of organic method, as presented and executed through the properties and laws of organic force. We have had twenty-five years of experience with this method of treating pneumonia, and can truly say that we have been rewarded with such success as to persuade us to its continuance.

We think it is not denied that much of the present practice with all disease is quite largely based on the experience of experi-

ment implied through historical and personal attainment, rather than on any pretence of presumed significance attached to laws and methods of organic instinct. While such experience may be of immeasurable value, we are none the less deprived of such source of knowledge when we seek to comprehend and anticipate Nature's methods in true ideal of organic fulfilment. If it is true that organic power *executes* the phenomena of disease, rather than a power or "active principle" in alleged poisons, then it is consistent to infer that a knowledge and correct theory, or explanation, of organic method would contribute much profit in connection with experience. In fact, experience and reason based on correct premises become the highest possible individual attainment.

This volume is not intended to fulfil a department of theory and practice, but to establish a basis and illustration for such a department on a different plan. We aim to present a theory or explanation which will

command respect as truly expressive of the principles, properties, and laws of organic method.

We omitted in the proper place to make complete mention of all relations involved with the vital property of sensation; we followed the direction developed, as irritable and painful. We desire to mention that in the opposite direction, with a sensation pleasurable, there is much to consider which has developed practices of serious import both with opium and alcohol, of which with the latter we anticipate more special mention in another part of this volume.

In the practice of medicine, sensibility will be required to have much to do with sensation, with a view to establish a different sensation in many instances, where no other problematic question is actively involved; also to make appeals to instinct indirectly through sensation, for the purpose of establishing a different expression of the vital property of Contractility.

VITALISTS.

MEDICAL history refers to a “medical sect” called “Vitalists,” originating with Van Helmont, and later espoused more earnestly by Stahl, who recognized in organic nature a principle of self-preservation outside of physiological duties. This was the germ ideal which later was recognized under the name of *vis medicatrix naturæ*, and now more truly expressed through modern thought by that of *organic instincts*. Stahl and others have thought this power was intended to execute important duties for the organism, and consequently should be endowed with a *guiding* principle that should *cause* such ability to manifest itself harmoniously in application to the best interest of the individual, — which would imply that this power should be guided by reason. Experience determined that this

power could not be trusted for intelligence ; and as *medical powers* became more generally recognized, this department of organic principle fell into disrepute, and in fact was largely kept in the background, out of sight, and ignored through lack of attention, while a cultured expectancy was developed of a presumed ability expressed under the name of "active medical property."

With a view to do justice to the ancient mind, as well as to draw the line of distinction which determines the difference between our doctrine of vital property — Instinct — and the ancient doctrine of the vitalists, we say the ancient mind *only* recognized that there was such a principle applicable to the affairs of life, which was certainly commendable. They determined nothing further which represented this principle correctly. Along the pathway of medical thought for centuries this principle has been recognized. The late Prof. Robley Dunglison, a medical scholar of distinguished ability, says : —

“Physiologists have noticed in every living body an instinctive action, — an action of the living principle directing its operations to the health and preservation of a living frame. . . . The existence, then, of such an *instinctive* power can neither be denied nor lost sight of in the treatment of disease. The error has been that undue weight has been attached to it, so that the practitioner was altogether *guided* by its manifestations, or fancied manifestations. . . . Stahl, the great apostle of this doctrine, supposed a power to be present in the system of repelling morbid influence. . . . There are but few cases, however, in which trust can be safely placed in this power.”

In this statement we find the curious fact illustrated of how near both Stahl and Professor Dunglison were to the discovery of the true import of this important *principle*, existing, or implied, in the name of a special vital property, — Instinct. While they failed to recognize that both physiological and pathological activities were guided by instinct, they also failed to recognize the several vital prop-

erties, *each* in itself distinct, as a *one* principle or factor of life. Also, they both asserted, or rather entertained the expectancy, that this instinctive power, to be of *practical use* in medical science, should be expressive of intellect. They failed to recognize, that, to comprehend life as a whole, it was extremely important first to consider the separate, distinct, and unlike duties of life which constitute this whole. The *fact* that such directed power did not express intellect caused this ability, in *their judgment*, to be set aside in the background as an unreliable department in the affairs of life. Professor Dunglison says: "We often hear, for example, of 'efforts of Nature,' yet the ideas attached to the expression are very unprecise." Notwithstanding the acknowledged existence of such power, no satisfactory knowledge was made applicable to the harnessing of this power *knowingly*, and guiding it into useful activities.

Yet this department of expressed power

comprises *all the power existing* that we have to consider in disease and medicine problems. The nearness to discovery without actual discovery is of narrow dimension, and found in the fact that it was *presumed* that intelligence should be *directly* behind in association with this power; while, as a fact, intelligence is behind with *indirect* association with this power. Instinctive power is not directly expressive of intellect; but intellect can guide this power indirectly through relations of a supplied *cause* for a different sensation, and thus give different direction to vital activity.

What we claim to present in the department of organic nature is implied in the *defining* of the several vital properties, showing that one is not the other, and that *each* has duties to perform of *special* and unlike function, executed within unmistakable boundaries of distinction, — duties direct, and of co-relation in the practical affairs of life, which constitute the *whole* of executive

method in the problems of organic life. Professor Dunglison says: "The error has been that undue weight has been attached to it [the power], so that the practitioner was altogether guided by its manifestation, or fancied manifestation." There is no "fancied manifestation" as a recognition of power; while, if the ideal of expectancy was to recognize *intelligence*, there might be very much "fancied." This power, directed by instinct, may do right, or it may do wrong. The "manifestation" of this *power* is the *only basis* on which to *place* a judgment. In place of any *possible* "undue weight" being attached to such "manifestation," it is *the only* manifestation to be *ever* watched by the physician, and differently directed as judgment may determine. It is the power manifest in disease that requires the ever watchful attention of the physician,—to be let alone when doing the best possible, and *guided* when *not* expressive of the best relations to life.

This one fact, that this power is directed by instinct, without *direct* intelligence, provides in nature that department to be filled by the physician, in a watchful oversight and guidance of this power indirectly. Guiding this instinctive power, rather than supplying a presumed medical power, or "active medical property," is the true duty of the physician, which plan is more expressive of a science. Professor Dunglison says : —

"It is within the college walls that the student acquires the prominent facts of his profession, and the great principles appertaining to its practical administration. He there learns the *theory* or *laws* of phenomena, on which all *sound* and rational *practice* is *based*. In no art can sound practice exist without theory. Theory is the mental process which binds observed facts or phenomena together, compares them with one another, and deduces appropriate *rules* of practice. It is to *theory* that we are indebted, not only for full practical usefulness, but for every science. Facts are, doubtless, the

elements of science, but the science itself does not exist until these facts have been brought together, sifted and compared, and general principles or laws deduced therefrom."

We fear that Professor Dunglison's ideal of accomplishment within "college walls" is not realized. If organic force executes the phenomena of disease, the *nature* of disease must be implied in the *laws* of organic force. Thus, if we do not understand the laws of organic force, we cannot understand the nature of disease; and without a knowledge of the nature of disease, no physician is sufficiently cultured to give his patient the best advantage of the possibilities provided in a medical science. The doctrine of an "active medical property" expresses neither a fact nor a principle in medical science.

“ACTIVE MEDICAL PROPERTIES.”

CONSIDERING that we have presented a basis of fundamental principles on which a new plan of medical science may find support, it may be questionable whether good cause remains for a further criticism of the plan we have alleged to be without representation in the affairs of life. When we take into consideration, however, the general habits, customs, and practices of a people, together with the pride, interest, reputation, education, and conscientious conviction which is associated with venerable names, learned, honorable, and influential, the most profound and conclusive details will be required to loosen the grip which has so long held fast to the doctrines which have come down to us through ages of revered respect. To give a sketch of the origin and progress of the doc-

trines of alleged medical science, from time to time, is without profit on this occasion, and only of historic interest and curiosity to people who live in this age of modern invention; and whether any persuasive inducement could be made to prevail in calling a halt for a review of fundamental medical premises, with any possible conviction of willingness to accept the dictates of a better reason, by a consideration of what has been said by a distinguished philosopher relative to early thought, remains with the reader to determine. Mr. Herbert Spencer says: —

“Early ideas are usually not true ideas. Undeveloped intellect, be it that of an individual or that of a race, forms conclusions which require to be revised and re-revised before they reach a tolerable correspondence with realities. Were it otherwise, there would be no increase of intelligence. What we call the progress of knowledge is the bringing of Thoughts into harmony with Things; and it implies that the first Thoughts are either wholly out of harmony

with Things, or in very incomplete harmony with them.

“If illustration be needed, the history of every science furnishes them. The primitive notions of mankind as to the structure of the heavens were wrong. The original belief respecting the form of the earth was wrong, and this wrong belief survived through the first civilizations. The earliest ideas that come down to us concerning the nature of the elements were wrong; and only in quite recent times has the composition of matter in various forms been understood. In all these cases, man set out with beliefs which, if not absolutely false, contained but small amounts of truth disguised by immense amounts of error.”

With the subject of medical science, the doctrinal or ideal *plan* of to-day is as it was in the days of Acron, who is mentioned by Pliny as the *first* to apply philosophical reasoning to medicine. Says an eminent medical scholar: “It is not difficult to satisfy intelligent men that there is a design in Nature;

but the problem consists in becoming able to recognize what that design is."

Our present medical philosophy is but deduction, endeavoring to harmonize modern facts with ancient imagination. Instead of considering ourselves a peer with ancient man in the field of mental perception, we have taken the position of a subordinate, and adopted his contracted and erroneous views of the great plan of human organic life. As a profession, we are indulging in a glory of intellectual attainment, and the world of thought has been made to believe that our present doctrines of medical science emanate from unquestioned premises. We are sailing over the sea of time, revelling in the sunshine of worldly fame, which contributes to our pride and bestows its applause of honor. Our department of learning is so skilfully intrenched and barricaded that no other department can attack our citadel of wisdom with any assurance of success; we have the ability to perpetuate our errors for another

century to come, and feel that our premises are impregnable to any assault, except from those of our own profession. It becomes us then to consider whether we will break away from the moorings to which tradition has bound us, and strive to interpret the great plan provided for the manifestation of human life; or continue in pursuit of that phantom, imagination, which has no prototype in the plans of the Deity. Are we in this age of wisdom—an age expressive of more intelligence than we have reason to believe ever existed in the human family previous to our time—the *victims* of antiquated errors? Are we entangled, like the ancient astronomer, with erroneous first principles? Has the medical profession accepted a presumed principle in Nature on which to develop the details of a science, and has it yet to learn that it is false? Must we surrender some of those accepted principles which have ever been the basis of medical philosophy? Such are the questions suggested for earnest consideration.

Our present medical philosophy suggests a practice based on the recognition of an "*active medical property*." Whatever this phraseology may represent, or be presumed to represent, it becomes evident that great importance is attached to what it may seem to imply, when we consider the tons of medical literature which are constructed each year to do praise to its fame.

This accepted principle of imaginary "active property" is made a basis for a theory of practice in medical science, and substituted as a fundamental basis for what is implied in the name of organic force. The question may arise whether "active medical property" and organic force, to the mind of the cultured medical scholar, are one and the same. It would seem *not*, when the direction in pursuit of discovery is made to contribute testimony. In experiments with material medicine there is sought a property "active," which is classified as *belonging* to the material medicine, rather than of determining how

a certain medicine may relate to the human organism as a *cause*, which shall occasion vital action to be differently manifested. The philosophy expressed in medical literature does not make material medicine a *cause*, but it makes it "active" as a property belonging to medicine, which provides for such material both physical and active properties, — to which doctrine the United States Dispensatory contributes full support.

It becomes difficult to distinguish, through the strict significance of language, any difference of implied principle between "active medical property" and the term "medical power." Medical literature has never defined the difference, or *denied* the applicability of the term "medical power" to represent the principle of implied relation. To the laity the terms are synonyms. The term "medical power" becomes frequently so undisguisedly crude as to be repudiated in discussion, while the term "active medical property" is cherished with great appropriateness of sig-

nificance. Should we say that the present medical doctrines *teach* that alcoholic spirit, and many other articles of *materia medica*, give power or strength to the human organism, numerous representatives of medical erudition will rise up in defence of educational dignity, and exclaim with demonstrative emphasis, "Not so! never, never!" while they will accept with pride the doctrine of "active medical property." Now, if medicine *acts*,—if that is the *right* word,—it must *act* by virtue of a *power*. There can be nothing behind the *act* but a power. Thus we must infer, if such language is expressive of *correctness*, that material medicine *gives* power to the human organism. This is precisely what the people do believe; and it is precisely what they should *not* believe. Such a belief is a belittlement of the dignity of science. It places the curative ability in the medicine rather than in organic force; it provides a medical science which has less use for brains than for a great assortment of "medi-

cal powers"; it places the ignoramus quite too frequently on equally acceptable premises with the cultured physician. But while the present plan may be of mutual satisfaction to both patient and physician, and remain a lucrative business with medicine pedlers, such is far from affording scientific premises for the practice of a medical science. Neither does it do justice to the legitimate rights of a people who look to the medical profession for the highest wisdom pertaining to the continuance of life.

While we say that such is the doctrine *taught*, no intelligent physician accepts the crude doctrine of a "power" being given, although the United States Dispensatory assures us that "alcohol is a very powerful diffusible stimulant, . . . and *gives* additional energy to muscles." This doctrine of accepted authority is quite generally believed by alcoholic spirit drinkers; and why not? While language may express certain *ideas*, it may also be true that such ideas are not

believed by the more thoughtful in the profession; at the same time, no plan has been made available to prevent the development of such ideas. Even if the more highly cultured do not believe the *idea*, the more obtuse mind takes the inference literally; and the professional clientage, to say the least, are being continuously educated to a *belief* which has more confidence in "medical power" to *execute* duties, than in a mental power to guide organic force to the fulfilment of duties.

The doctrine of "active medical property" gives undue importance to medicine, while the department of organic force is admitted by our most prominent physicians to be a *problem* for "future generations," and not ours. The doctrine of "active medical property" has been evolved from premises more crude even than "medical power," although no profit or credit is to be derived from such mention.

The great and general belief, whatever may

be the *name* given, is that *in* material medicine *exists* some *wonderful principle*, which in itself becomes a constituted *agent* that executes curative process. Such is the *idea* which has turned the human mind away from the fertile fields where the principles of a science may be found, into an exciting pursuit of an *ignis fatuus*. We also find it stated in the United States Dispensatory that “the *materia medica*, in its most comprehensive sense, embraces all those substances which are *capable* of making sanative impressions on the human system.” This language is not only very obscure, but puts the capability in the medicine, which is an idea ever made prominent. Such capability *to do* consists in being capable of making an *impression*. This doctrine which has come down to us in the *idea* of medical ability existed at an early period; and while the *idea* has changed with the more cultured, the language still remains in medical books and literature, and becomes a stumbling block and mis-

director to all who cannot rise above the literal significance of such phraseology. In the older works on *materia medica* we find medicine thus defined by Dr. Wood: "Medicines are substances capable of producing by their own inherent power certain modifications of the vital functions."

Notwithstanding the wish, with the more advanced thinkers, that the term "medical power" may be eliminated from medical literature, it remains true that this term was never before used with such freedom and frequency as it is at the present time. While a grand open denial is occasionally made of the appropriateness of the term "medical power," we have yet to discover in medical literature any expression of condemnation of the doctrine of "active medical property." If such doctrine has been outgrown, such fact has never been expressed through medical literature.

There is a significant nicety associated with these two forms of expression of a valued

principle which is presumed to pervade material medicine. It is true the term "medical power" is a crude form for the expression of a thoughtful idea, while the term "active medical property" is more elegant, and is quite largely used where elegance is desired. The term "medical power" is openly exposed to pungent criticism without means of protection; while that of "active medical property" is barricaded and unget-at-able by the ordinary critic. When analyzed, no different *idea* can be extracted from the *language*, although at first thought such would not seem to be true. While the first term is exposed to criticism, neither represents any existing principle in medical science, and the latter soon loses its presumed significance when brought into immediate defined relations of useful purpose.

It is important that we dispose of the question, What is it desired that this "active medical property" shall *do*, as a primary doing, and what is it desired to have accom-

plished *later*, as a consequence of such early acting or doing? While there is recognized a property called "active," does accepted medical philosophy *require* such property to *act*, or is it required to do something quite different?

Here is a noticeable fact in medical doctrines, that, when we get down to business with this "active property," we find the duty to be executed is, *not* to *act*, but *only* to make an *impression*. There is a wide distinction between acting and making an impression. After the so called impression is made, some other agency of entirely different name and source is required to *execute* the *special duty* of the problem. It is to be remembered that an impression is not a something done, but a something recognized or discovered by the nerves of sensation. After the so called impression is made, what is said to be done next? We are informed through medical literature that "a reaction" is established. This so called reaction is an action executed by organic power. To make it a *reaction*,

the medicine must first act; otherwise such action is primarily a *direct* action.

When we get down to fine points, we find that the medicine only makes an impression, in place of acting. In the practical affairs of medical science we find that the *use* of medicine is to *cause* some modification, or different direction, of *vital* activity, of more or less intensity. It is the organic force that *does* all the acting or executive duty, while medicine becomes the *cause*, whose presence occasions such *change* of activity. When we pursue this doctrine of "medical power" and "active medical property" to the last ditch, we find *no mysterious* principle of power or active relations to exist; the one great demonstration called "making an impression" seems to be the total of its required duties. The "impression" is still further disrobed of mystery when we give true significance to its relation of presence. The medicine has fulfilled the same relation, and made similar "impression" on the *involun-*

tary department of vital power, as the whip makes with the *voluntary* powers of the horse: it has become a *cause* for a different vital activity.

Medical theory has great complexity of construction. In the practice of medicine, the *feat* to be executed as a connective relation of the *idea* taught in alleged science, which has been accepted with scholarly pride as a *scientific exploit*, consists in the *transferring* of the so called "active property" into a manifestation *called* vital "reaction." Now, to make close connection, it has been necessary to have the "active property" *first* make an "impression," and the "impression" to induce a vital "reaction." This great double somersault act, which *scientifically* converts "active medical property" into vital "reaction," is permitted to be the unquestioned, appropriate language of medical science, while in fact it is the most masterly feat of linguistic jugglery ever perpetrated in the name of science. While to-day this great

feat of contortion is considered quite proper, and accepted with educational pride, yet, when organic nature is correctly understood, the bridging of this chasm between the imaginary and the real will afford much amusement at the method which the human mind resorted to in the hour of its peril, when impaled on the doctrines of traditional acceptance.

Now, this is a very circuitous way of making known the fact that the presence of material medicine may *cause* the vital power to act differently. The doctrine of "active medical property" has no more claim to *scientific* attainment than the doctrines of the alchemist, through which it was sought to fulfil the expectancy of transmuting the baser metals into gold. While the doctrine of "active medical property" has long been accepted as a representative principle in medical science, like the pre-Copernican doctrine of the sun's motion, there exists no support for such acceptance except an erroneous interpretation of appearances.

OBJECTIONABLE QUALITY.

THE scientific name for that presumed principle which relates medicine to the human organism in such manner as to receive the name of "active medical property," is expressed more truly, and in better harmony with fact, under the title of *objectionable quality*.

The true relations and principle are implied in the *fact* that material medicine in its atomic material *construction*, be it mineral, chemical product, or certain organic production, is so far removed from being nutritive material that its *presence* becomes objectionable within the domain of life to that degree that a *special* vital effort, instinctively directed, is exerted in relation thereto with a view to expel the same. Who will deny the validity of this statement? So far as relation

exists, the phenomenon called the *action* of medicine is entirely a *vital act*, instinctive with a view to self-preservation and elimination. The instinctive act may be safely expressed, or otherwise. When safely directed, such expression is precisely similar, and is the same *kind* of *fact* which at other times is called the *vis medicatrix naturæ*, or Nature's method of cure. Such *act* is a pathological vital act. Also, this same manifestation of instinctive vital effort to expel material of *similar* relation is no more or less than disease. Disease is pathological vital action; and pathological action is vital action in relation to material, not for nutritive or constructive purpose. When instinctively directed, vital action is *not* safely directed. We recognize such *fact* in the name of disease that requires medication. Disease is a vital act, which is frequently said to be due to the presence of "morbific material." The so called morbid material is *not* morbid as a material, but *objectionable* in *such place* as

a material; and it is a *kind* of material the presence of which is not to be made useful in the affairs of organic life. A morbid *vital act* is required to eliminate such material. This morbid vital act is pathological vital action. Disease is quite frequently such a dangerous vital act that the physician is required to suppress or divert such act. Now, the same *principle* becomes applicable to *suppress* or *divert* such action as was implied in a *first cause* to *establish* such diseased action, or pathological vital action. That is, some *other* material which is called medicine may be placed within the vital presence that may be a *cause* for vital action to be suppressed, — or, differently and more safely expressed, to fulfil the purpose.

The *fact* that such is the relation of non-nutritive material to the human organism as to *cause* a differently manifested *vital act*, becomes the *means* through which the physician may *make* application to direct instinctive vital action. This instinctive vital

action is *all* the action ever displayed by the involuntary living organism. Thus, the physician takes the *advantage* of this *fact* and method to change or modify pathological vital action in such manner as to be of best interest for the individual organism, which becomes the fulfilment of practical medical science. While this principle of instinctive vital action has always been thus instrumental in executing the duty, the physician has largely given credit through medical literature to some mysterious principle inherent in material medicine, called "active medical property." There is no way to solve disease and medical problems except through a knowledge of the laws and methods of organic force.

We now wish to call attention to some important statements made by physicians of recognized eminence. Said Professor Gross, of Philadelphia: "We know very little of the essential nature of disease; indeed, nothing at all." Disease is not recognized in

medical literature as pathological vital action, but something done, or influenced, by an *agency* which mankind experience great difficulty in comprehending. Said Professor Davis, of the New York Medical College: "The *modus operandi* of medicine is entirely unknown." Said Professor Meigs, of the Jefferson Medical College, Philadelphia: "All our cogitations of the *modus operandi* of medicines are purely empirical." Says Professor Dunglison (in his *Materia Medica*, Vol. I. p. 94): "The *modus operandi* of remedies is not always clear; yet by careful analysis we can generally appreciate, in the main results at least, although we may have much difficulty in comprehending the precise mode in which results are accomplished." Commenting on his own statement, he adds: "This applies especially to those cases in which the agency takes place by sympathetic influence,—an influence proverbially obscure, and frequently invoked with the view of covering the ignorance of the observer; as

vitality and organic action are at times used by the physiologist when a function cannot be explained by any known physical facts or arguments."

This is a very peculiarly worded expression. The inference is, that when a physiologist is not able to explain *organic* phenomena through "physical" agencies, or agencies outside of organic process, to "*cover* such ignorance" he resorts frequently to the phrase "vitality and organic action." In such comment there is implied an exhibition of thought confused through erroneous culture relative to premises whose principles are in most profound obscurity.

In such remarks as quoted we find a confessed inability to explain *how* a medicine may *do* what it *never did* or *can do*,—that what is *called* the *modus operandi* of medicines is in fact pathological vital action, and nothing different, is not recognized.

Said Professor Paine, of the New York University Medical School, and author of

“Institutes of Medicine”: “Remedial agents are essentially morbidic in their action. They operate in the same manner as do the remote causes of disease.” Says Dr. Bigelow (Nature in Disease, p. 17): “The effects of remedies are so mixed up with the phenomena of disease, that the mind has difficulty in separating them.” Much difficulty indeed!

We find in these quotations the same principle recognized which *gives* action to “remedial agents,” and which is required to make *operative* the “remote causes of disease.” Such is most significantly true; yet the “agent essentially morbidic in action” is the “agent” pathological vital action, *acting* in relation to *both* the “remedial agent” and the “remote cause of disease.”

The action which is called the *modus operandi* of medicine, the action which is called disease, the action which is called medical action, the action which is implied in the name of “active medical property,” the action which is said to express the “*vis*

medicatrix naturæ," are all given expression by that *one* principle existing in organic nature, which is more truly and scientifically expressed in the name of *pathological vital action*, and action of the living principle, in the general name of Organic Instinct. Notwithstanding this statement may be in contradiction to beliefs of mature age, it remains true that no writer of medical literature has ever been able to draw a line of distinction. In the mean time eminent medical scholars have said that "this generation, and generations to come, will have passed to their everlasting rest before a discovery of the secret of vital activity is made." If organic force becomes recognized as a *factor* in medical science, there should be some acknowledgment of duty credited to such department and properly outlined.

The impulse of conviction inspiring to a belief in the existence of such a principle in Nature as is presumed to exist in the name

of "active medical property" received unparalleled recognition through the announcement of the discovery said to have been made by Dr. Koch. Such influence of apparent acceptance, recognized through the press, gave a long lease of life to expectant usefulness of this department of mysterious nature.

It was stated that Dr. Koch had discovered a rare "active medical property," — some kind of "active principle," to execute curative process, — something wonderful, — a compound of great value and of high price. A Boston physician went to Europe to learn more about this wonderful ability, and sent home a cablegram stating that "the action of this material is certainly as wonderful as that of any known medicine." Dr. Koch says of his discovery : —

"Regarding the manner in which the specific action of the remedy on tuberculosis tissue is to be represented, various hypotheses may naturally be put forward. . . . In what way this process of cure occurs cannot as yet be stated with

a certainty. . . . There is no question of a destruction of the tubercle bacilli in the tissues, but only the tissue enclosing the bacilli is affected by the remedy."

It may be true that Dr. Koch has discovered some compound the presence of which is so inimical to life that this material in presence of tuberculous growth of weak vital attainment may occasion such tissue to surrender its life and break down, and thus become susceptible of elimination. Such a fact is not an isolated fact in nature, but is a fact which has a variety of kin, and is far from being strangely mysterious. New cicatricial growth of tissue may and does frequently break down under the shock which poisons may cause to the life forces. Precisely the same principle applies when strong acids or alkalies are brought in contact with healthy tissues externally. Such is the whole of the discovery. And even should such become a possible fact in numerous instances with tuberculous tissue, it will remain a fact of no

practical advantage. The laudations of the period were not made in behalf of a discovery of such a fact, but in praise of an important discovery of "active principle," which medical men said that "for the present at least it is impossible to explain." An editorial statement in a scientific journal of high repute said, relative to such material, "That the mysterious substance is one of immense strength, and capable of producing the most powerful physiological effects, cannot be disputed." Our theory of "physiological effects" persuades us to accept *only* vital power as being possible to execute such duties.

When we recognize the *nature* of instinctive vital duty in *relation* to material *objectionable* within the field of vital jurisdiction, — which expressed fact has ever been recognized as *the* fact which is made to testify to the *discovery* of an "active medical property," — it then becomes evident that there are waiting a hundred million more *possible*

objectionable compounds with which to make *successful* experiment, with a view to the discovery of "active medical properties." Dr. Brown-Séquard says : " Physicians — unfortunately I speak of myself as well as others — are biased. This bias prevents progress. They have received an education which has given them certain notions, and these notions prevent a free examination of certain questions."

On the subject of alleged propagation of disease through the agency of bacilli and nidus, while far from being an expert in that department, we suggest that it is in harmony with the nature of things that in all variety of pathological product there exists organic material which may be food for some *variety* of microscopic life, vegetative or animal, ever ready to thrive on such material when no longer existing in protection of healthy vitalizing agency. Each variety finds some certain product more favorable for development and multiplication ; and such a family of bacilli, as

a general fact, in place of being a *cause* of such disease, finds possible condition for existence *only* in *consequence* of such disease. In association with a bacillus found in connection with a certain disease being judged capable of propagating similar disease, we have more than one kind of fact requiring analysis. That is, What would become the primary *cause* for *abnormal* sensation? Is it a bacillus, or the bacilli germ family as a family, or the associated vitiated product in which the family live, or the sewage material and dead product of the family? Through such material there may be a *cause* — as a product of multiplied bacilli, or a multiplied vitiated product obnoxious — for a *primary* abnormal sensation; after which *secondary* causes for abnormal sensation and development of pneumonia, or other disease, can no doubt be made to exist. While it is inferential that pneumonia may possibly be propagated in this way from primary *cause*, from some relation of the pneumococcus, it is far

more rational to infer that pneumonia without such propagation *often* becomes developed to a certain degree before even the *first* bacillus could take up a "quarter section" in the sputa. Now, while it may be true that pneumonia, or other disease, may be developed from a great variety of *cause* for a *primary abnormal* sensation, yet in the sputa of several diseases from *either cause* may be found a temporary home for the raising up a colony of the microbe family or pneumococcus. Thus we have good cause to believe that sporadic pneumonia, as well as other disease, comes into existence before the microbe influx locates on the premises.

While it is true that the filth product of disease with one person may become cause for disease with another person, the intervening agency of the microbe will be endured with less fear by the next generation. Rather than seek means for *trapping* the microbe, we should be more hopeful in dealing with abnormal sensation. The microbe bacillus, or

vitiating product, can have *no other* relation to disease than a primal *cause* of *abnormal* sensation; and while such primal cause may exist in such a variety of manner, it is but rational that we entertain feelings of less hostility toward the microbe. The ushering in of active disease without a primary abnormal sensation is an impossibility. Abnormal sensation always becomes the intervening fact and existing condition between *cause* and *effect*; and many unsolved problems await the recognition and utility of the sphere of duty implied in the separate vital properties.

When we recognize medical science as being a science based on the *law* of the *power* which executes its phenomena, — the organic force, — we must also recognize that we cannot comprehend the law of organic force as a unit, any more than we can comprehend mathematics as a unit, but each must be reached through the several departments which constitute its whole; and while recognizing the function of the four ultimate vital

properties, we are required to define the separate duty of each, and how they apply in the problems of life. It is through a knowledge of the duty and law that we are enabled to give true *significance* to *facts*. A knowledge of the law of gravitation supplied the evidence for the astronomer to *locate* the telescopic undiscovered planet Neptune; and directing the telescope to that point in the heavens for the first time, the planet Neptune was discovered. It was discovered through the *law*, not from a general promiscuous hunt. A knowledge of organic law not only enables us to give true significance to fact, but enables us to *eliminate* many of our long cherished deductions, which have been presumed to be, but are not.

When we recognize that all *cause* of disease has its first presence made known to the human organism through an *abnormal* sensation by that special property, which *fact* of presence is conveyed to instinct, then this agency marshals the forces into activity to

present those phenomena we call disease. It then becomes apparent that the "germ theory of disease" supplies no relation as a *cause*, unlike an *abnormal sensation*; and while we recognize the multiplicity of varied *causes* for an abnormal sensation, it again becomes evident that the doctrine of "germ theory of disease" is quite largely a misnomer. The doctrine, to be correct, should be *germ theory of cause*. Disease is pathological vital action in relation to *cause*; and while the associated filth-material with germs, or microbes, may be a *cause* in some instances, it is well to remember that a cause is quite distinct from the disease.

It is evident under the law that quite too much prominence is being given to the microbe doctrine in relation to disease, and too little to the grand army of organic force, which may resent such intrusion by inoculation. A *cause* of disease is no more *active* than a boulder on a railroad track is *active* as a cause of a railroad accident. In each case it

is material in the wrong place. The *effects* of medicine are not due to the *action* of medicine or an "active medical property," but an *action* of an entire different department relative to material in an unnatural place. When we know the cause of disease, such knowledge is quite frequently of but little use in the treatment of disease. It is a knowledge of the *nature* of disease, implying the *law* of organic force with that *kind* of disturbance, which contributes to our aid in the treatment of disease.

When one looks at the disease problem and its treatment, through the four vital properties and laws of organic force, an entirely different field of panoramic vision is presented. If organic force *does not execute* the phenomena of disease, and likewise those *actions* which develop the *effects* of medicine, then we shall be forced to admit that we are roaming in a prolific field of delusive imagination.

The general and more specific *effect* of medicine in relations with the human organ-

ism is not a subject of previous conclusion through the law, but a fact determined by observation and deduction from experience; and while we may describe the phenomena of appearance, it is of the greatest importance that we accept deductions and theories in harmony with the *laws* of organic *duty* in relation to the developed appearances. While some material may be a *cause* for violent involuntary activity, other material presence may be quite the opposite; in fact, such presence forbids the possibility of activity, through which contact there may prevail a temporary abrogation of possible manifestation of *sensation*, — thus making it possible frequently to abort what would otherwise be a dangerous activity from the presence of *other* material, and consequent mandate from the commander in chief, Instinct. In such instance a supply of such material for abrogation of sensation is a manœuvre of Sensibility outwitting Instinct by cutting the wires, we might say, which communicate the knowledge of such presence.

While certain material presence may abrogate sensation without complicating sensibility, other material in the name of sulphuric ether, experience has taught us, will abrogate both sensation and sensibility, and yet it may remain possible to execute involuntary activity of circulation and respiration through the agency of instinct. Instinct is the first vital property born, and the last to die, — a wise provision for organic preservation.

In the following quotation from an eminent physician, we find a statement which has relation to the subject of *first* and *secondary* causes in disease : —

“In the large mass of morbid conditions, although the *cause* which immediately produced the disease is taken away, the complaint continues. . . . The difficulty in discovering the precise cause of a disease is often extreme. Fortunately, the discovery is not always a matter of moment, inasmuch as the disease usually continues independently of the cause; and it is

the disease — the modification in the structure or function that constitutes the pathological condition — which we have to combat.”

While we cannot accept the continuance of disease without *a cause*, we will first notice the very delicate lines of distinction which are made to prevail between our statement that pathological vital action is disease and the language here used.

At first, it would seem that the “pathological condition which we have to combat” was almost equivalent to the acceptance that pathological vital action was disease. The statement is strongly persuasive in that direction, and at the same time *far enough* removed not to be convertible into such inference. A “pathological condition” may imply both structure and action; and when applied to structure it would be more correct to infer that pathological condition was more the *product* of disease than the disease itself. It is the “function,” or action, “which we have to combat.” There is a significant difference of

wide distinction, *many* times, between "pathological condition" and pathological action. The distinction to be inferred would be without interest in this place were it not so closely connected with the statement that "the disease usually continues independently of the cause." Now, while it may be extremely difficult to determine the *first cause* of such commencing disturbance, and even when we do so determine and are sure that such *cause* has been removed, we are required to associate with cause the idea that disease can *exist* only when cause occasions a sensation abnormal. The material cause, if such it be, is the cause of what? It must be a cause of a new sensation, which is abnormal; otherwise no special instinctive vital action is established. The special instinctive action is the disturbance, or disease,—the pathological vital action, which must always be preceded by a cause for abnormal sensation, and continued because a cause for abnormal sensation continues to exist.

Now, while a cause of disease must be born in a name that affords cause for a sensation abnormal, it remains true that secondary cause for abnormal sensation will develop, and *continue* to be a cause for continued pathological action even when the primary cause of abnormal sensation has been removed. Such may be illustrated through the fact that the removal of a sliver from some fleshy part may be followed by inflammation. One simple fact rightly understood and truly interpreted will teach as much as a thousand facts of the same kind. A primary cause for abnormal sensation may develop secondary cause in the name of mechanical pressure, or heat on nerve extremity, developing irritability or pain, and abnormal sensation of greater degree. Thus the disturbance would continue unlimited, were it not possible to deploy vital activity or establish toleration, natural or artificial.

The expression in medical literature, that a "diseased action in a tissue goes on aug-

menting until the function of other tissues becomes deranged by extension of morbid action by sympathy," is a fulfilment of changes executed through *cause* and *effect*, as implied with first and secondary causes. Such disturbance is quite liable to develop with mucous membranes and external skin, where capillaries and nerve extremities are abundant. In cellulitis the liquid product of morbid action may become a secondary cause for extension of disease. The vital property sensation becomes the intervening agency through which *cause* may be known and followed by a development of *active* disease. If there is no pathological vital action, there is no *active* disease. There may exist certain morbid sensation from prolonged causes, which are termed nervous diseases, where we may be able to detect but little special activity of long continuance in any one direction,—such morbid or abnormal sensation being followed by a great diversity of transient mild disturbance without regularity of manifestation.

With acute disease frequently, and sometimes with chronic, the *sensation* is the condition to modify or suppress. Abnormal sensation is the *only* condition quite frequently for complaints relative to which no morbid vital action can be discovered. Sensation abnormal, when *known*, should be alleviated as early as possible, to prevent instinctive special actions of dangerous severity, — which incident may be illustrated in case of colic pains, or a mechanical blow on abdominal walls. The use of opiates may abort or prevent severe inflammation of the region. When abnormal sensation becomes known *only* from subsequent results, it becomes the duty of the physician to diminish sensation occasioned from *secondary* cause, with a view to diminish the severity and limit of instinctive morbid action. Sensibility must make appeal to suppress or differently deploy pathological action, by *first* causing a different sensation, thus indirectly guiding instinctive action as judgment may deem most beneficial.

In the treatment of disease, we have for consideration a modification of sensation early, an elimination of material cause, diverting instinctive action when required, and inducing more or less toleration later. Sensibility may supply a *cause*, to which Instinct responds with a special activity; and such relation of cause and effect is represented in medical literature as the making of an "impression," and establishing a "reaction."

In some diseases of the skin, which may be first started from mechanical irritation, secondary cause becomes developed each day sufficient to have a continuous presence of cause for an abnormal sensation and prolonged skin disease. Continuous abnormal sensation is made possible to exist to such a degree as to develop superficial change of structure, thus keeping a chronic abnormal condition of cause and effect wholly confined to the skin. Thus the term "neurotic disease of the skin" becomes quite correctly applicable. Such conditions of the skin are thus continued,—

from which basis the indications for treatment would be to modify superficial sensation by removal of local cause rather than the adoption of constitutional methods.

When engaging in the solution of problems in disease, from the basis of the four vital properties, we are in possession of quite similar aid to that afforded in mathematical problems, involving addition, subtraction, multiplication, and division. How each of said departments applies, and becomes related to the problem, becomes the *thinking* application in direction of a solution; also the practical basis for application. And thus with problems in disease and use of medicine, — when we become equally familiar with the duties and fulfilment of the separate vital properties in the affairs of life, we *think* such application in the direction of a solution. There is no way to comprehend the subject of mathematics except through the several departments which make up its whole. There

is no way to comprehend the nature and laws of organic force except through a correct knowledge of the separate vital properties. When we search medical literature for such knowledge, we look in vain!

Thus by recognizing the department to be made operative, and how controlled and made applicable, we have acquired the most essential knowledge on which to predicate the practice of a medical science, and make experience more instructive. We may have a rational reason for anticipation in advance of what may be expected from statistical results. We are enabled to sit in judgment with a knowledge of the organic law of activity, and can better comprehend the method and possibility of appliance to the greatest aid in conservation of vital energy. Expectant treatment is always justifiable, when no good reason based on a knowledge of vital activity, can be found for interference.

If we are to recognize organic force as the active agent in the affairs of human life, it is

well to recognize the material stock used, and the true relation of material not usable, and render such aid as will best enable instinct to perform its duty. Organic force carries on the business of human development and continued preservation of duplicate, by a physiological process, with a material stock in trade consisting of nutrient material, air, and water. In disease, or with pathological vital actions, there is generally required a larger proportion of water to facilitate the extra elimination of the waste tissue and soluble pathological product.

We have here submitted for consideration what we allege to be an interpretation of the nature and method of organic force, as manifested through the human organism in separate division of four ultimate vital properties, each executing its part, included within limits and boundaries of significant distinction, determined and defined in accordance with the special duties which each execute in the affairs of life, — on which premises we allege

that it becomes possible to comprehend the true nature of disease and the correct relation of material medicine to the human organism. We suggest that this plan and interpretation be given such crucial test of comparison with organic facts and methods as to determine, through verification or otherwise, what validity may attain to such representation. We also ask the reader to make comparison of this plan and theory of medical science as a whole, and in detail, with the plan of medical science based on the doctrine of "active medical property"; a plan where the primary claim of "active" ability is admitted to be of "mysterious" existence and outside the limit of comprehension in any of its essentials; a plan of medical science which is overflowing with valuable suggestive facts, yet without system sufficient to give respect to doctrinal theory of explanation; a plan which fails to develop a comprehension either of the nature of disease or of the *modus operandi* of its medicines; a plan and

detail which have developed a *belief* with the laity, to say the least, that the presumed *agency* implied in the name of "active medical property," when placed within the citadel of life, will give battle in valiant *deeds* of glory with disease, and engage in the work of purification, renovation, and restoration, and which will put the organic tabernacle in commendable relations for the pursuit of happiness; a department of alleged science relative to which the most highly cultured scholars in the learned profession make the most derogatory remarks of condemnation and belittlement of its erudite scientific accomplishment which language has made possible in the hands of skilled and accomplished linguists; a plan which inspires the laity to have far more faith in medical than mental powers, and which is of great detriment to the true position and value of a professional education, and of greater detriment to themselves.

PARTIAL SUMMARY OF SCIENTIFIC PREMISES.

SOME of the more salient premises for consideration here presented include the defining and function of the several vital properties : that medicine has no *active* property ; that the *effects* of medicine are not due to the *action* of medicine ; that the use of medicine cannot be predicated on its action, but as a *cause* for a different vital act ; that the cause of disease is not active ; and that there is no such relation as the “ active cause ” of disease.

We have defined the *nature* of disease as being based on a principle which we have defined in the nature and duty of organic force. We have presented the principle involved in the *modus operandi* of medicines as dependent on *active* organic force, rather than a

principle belonging to "active medical property." We have presented the name and nature of a principle as the *first* condition of life properties, which precedes active disease; namely, *abnormal* sensation. We have presented the name of a principle provided in nature for the termination of active disease, which makes it possible that disease may be self-limited, namely, toleration. The medical philosophy of record *starts* active disease by having the *cause* act. The recognition of the fact of self-limited disease has long been accepted, without a presentation of principle which shall permit such fact to exist.

Will any reader show, not in blank denial, but through the philosophic relations of cause and effect implied in the nature of organic force, and in the nature of material medicinal relation, that we are not right in every statement of this summary? If we *are* right, the profession must accept as a truism the assertion that medical science is higher up among the events of nature than what is im-

plied in the doctrine of “active medical property.” If we *are* right, the idea and thought-level of a medical science with the laity, who are the recipients of its application, and whose lives are in jeopardy, should occupy a higher position in the realm of fancy than the receiving of a supplementary energy in the name of an “active medical property” from the hands of the ignorant and uncultured in the science of organic force.

CHEMICAL FOOD.

IN this place we will mention a department of supply which is indorsed and prescribed to aid in support of the human organism, existing as a product of *chemical* agency.

Omitting, for personal reasons, mention of any particular preparation, we will say that a great variety of such compounds are on the market, supported by professional approval. In contrast with such an *expectancy*, it is claimed by many of our most accomplished scientists that *all* material susceptible of *assimilation* must be lifted up from its elementary condition by the agency of the vegetable kingdom, before it can be vitalized by the organic forces of the animal kingdom. The animal may assimilate the vegetative product or the structures of other animals ; but when

organic material has gone *backward* into chemical change, and lost its organic structural atomic arrangement, such material is no longer possible of assimilation. In other words, the human organism cannot assimilate or vitalize *ultimate* elements or *chemical* compounds. If this doctrine is true, the many preparations for "building up the organism" existing as *chemical products* are a gross imposition of dangerous relations, contributing more to develop mercantile pursuits than a supply for organic construction. When the students of medical science recognize that organic force, rather than "active medical property," executes the many problems and phenomena of life, there will naturally arise the question, not only as to what are the conditions most favorable and what laws are implied, but what material will become of most beneficial aid to the execution and completeness of its purpose, — whereof specially prepared organic material and supplied aid to digestion will be recognized as far more

useful in toning up the system than chemical compounds.

There are many practices in alleged medical science which it would be of great benefit to the laity to have reviewed by the profession.

SENSATION AND SENSIBILITY.

THERE is another co-relation between the vital properties of sensation and sensibility that we have not mentioned, which is receiving some attention, and is worthy of more than it receives. It is represented frequently under the name of "hypnotic suggestion," of more or less degree applicable to the inducing of analgesia, or insusceptibility to pain. This relation of possibility is quite well known to exist between a *sensibility* of one person and the *sensation* of another, — quite unlike the mention of "temporary abrogation of all sensation." It is more a separation or dissociation of the sensation of pain from the sensibility, even to that extent which permits of surgical operations without pain while the subject may be either

conscious or unconscious of the transpiring event.

While a knowledge of such possibility has been historically presented as a "mesmeric event," we must recognize in such fact a peculiar advantage, which the physician can employ quite frequently with his patients,—to them not perceptible,—that will effect much in alleviating numerous disagreeable sensations. There is also a co-relation between those vital properties existing with the *same* individual, often perplexing and difficult for the physician to overcome. There are many *self-suggested* complications which take the name of disease, far more amenable to tact, peculiar influence, and conviction, than any effects of material medicine. Sensibility can produce sensorial *feelings* which are responded to by Instinct. The *idea* that an emetic has been taken may cause emesis; thus *ideality* may often be productive of good or evil results. We have had a variety of very singular and interesting experiences

with such incidents, and while there is much of interest and usefulness to be found with such a possibility of relation, the subject would require much space to do it justice.

When we recognize the fulfilment of life duties on the basis of the four distinct vital properties, it becomes evident that the language of Dr. William B. Carpenter, when referring to the "automatic" function of the cerebrum, should be somewhat modified. He says the cerebrum is a "superadded organ, the development of which seems to bear a pretty constant relation to the degree in which intelligence supersedes instinct as a spring of action." We cannot, however, thus infer such competitive relation. Automatic action of the cerebrum is wholly unlike the automatic action of instinct. The two departments are entirely different as to their *kind* of duty; although the function of the cerebrum is a superadded development to the developed function of instinct. The development of intelligence holds essentially no com-

parative relations with instinct. The instinct of the Hottentot's bodily organism is quite equal to a Shakespeare's. Instinct is a department of life duties, implied in the development of the bodily organism, whether there be added more or less of cerebral intelligence. The automatic action of the cerebrum is a special associate quality with intelligence or sensibility, which, in the purpose of this volume, we find little cause to mention.

We pay due respect to this important department in saying that the automatic action or unconscious cerebration of the cerebrum is a wonderful development of life possibilities at the present day, which is receiving special attention in the hands of societies for psychical research. Many of the superstitious mysteries of historical mention, as well as facts hitherto ignored or treated with derision, are being lifted up to a rational recognition and explanation through the higher possibilities of cerebral achievement.

RESPONSIBILITY.

THERE are certain contingent responsibilities of very serious results growing out of this miseducation of the people on the subject of medical philosophy. There is an ever expectant belief that some wonderful and useful curative agency exists within material medicine, whereby those who make a study of medicine rather than of the human organism are liable to make discoveries of great magnitude. This expectant possibility and direction of discovery have always been cultivated to such an extent by the medical profession, and ever been presented in such emphatic language by the medicine manufacturer, that our people are continually on the alert to take early advantage of such alleged discovery. In no age of the world have our

people been better prepared to become the victims of imposition by medical swindlers than in this generation. There seems to be no possibility of escape. The public and the law-makers hold the same views of expectancy with the ignorant, that some wonderful discovery may be announced at any hour, possessing all the curative abilities for which they have so long looked in vain.

With such a public judgment the profession hold a position of unmistakable disadvantage, in the fact that while such is the expectancy and direction of discovery taught, there is less *apparent consistency* in denouncing a possible *greater* discovery. A very numerous people are fast accepting the belief that medicine manufacturers are really at the head of the profession. Is it not quite too often true? They are presumed to make the wonderful discoveries in medical science, and prepare the "active curative properties" in readiness for duty; while the physician becomes the go-between or common carrier of

the wonderful discovery to the bedside of the afflicted. We regret to say that appearances, custom, and apparent common consent contribute to the perpetuation of such a belief.

The medical profession of to-day are the victims of a transmitted delusion of medical philosophy, which makes the profession responsible for this age of gullibility and medicated invalidism unequalled in the history of human misfortunes. As fast as one reputed discovery has been determined by experiment not to meet the emergency, two more appear above the horizon clothed in language more cheering. Thus there is developed a condition of delusive hopefulness that maintains a cloud of superstitious belief which is appalling to contemplate. The delusion of cultured expectancy on one side, and confessed ignorance of the laws of organic force on the other, presents such a deplorable state of thought that our people are ever ready to make trial of every vaunted specific of speculative discovery,—thus parting with

their money, health, and many times their lives, in pursuit of this phantom of mysterious curative *agency*. We must also remember that the *law* of disease makes it possible in many ailments to recover, with little if any aid through medical appliance; and that, based on this fact, great reputations of *curative power* have been established with simple compounds, whose curative principles have been thus experimentally determined and established, and vouched for by numerous recorded statistics of cure from the hands of those who know the least about the subject. In such cases, the *principle* implied in the *modus operandi* is quite like the North American Indian method formerly used to arrest eclipses of the moon. A general din and clatter of all possible noises persistently enforced always experimentally succeeded in driving away the monster who was preying on the earth's satellite. While the culture of civilization finds cause for much merriment with such fancy, what can be more conclu-

sive and accepted as *satisfactory* proof of an *existing* curative agency in material medicine than well attested records of experimental trial with such remedies ?

As we have previously remarked, there is no protection in law, and no protection in thought outside of law. The people are educated to become victims, and turned over to the tender mercies of the unscrupulous impostor, and censured for the credulity which has permitted such development of events. Thus for a long time generations have come into the world philosophically weighted with a destiny against which they have had no power to contend.

As seriously as it may be possible to experience regret for this state of affairs, it becomes equally charitable to ask what is being done in the way of enlightening the people above such possibility of becoming victimized ? Nothing, nothing at all ! They are being educated into this condition. They are educated against the possibility of ra-

tional thought to be made applicable for their own protection. They are not educated to comprehend that a medical practice of *scientific* guidance is based on the laws of organic force, which affords premises of great superiority to the cultured mind for the fulfilment of such practice, but are educated to look for aid through some mysterious agency of "active" *ability* in material medicine, which is open to *discovery* and practice by the uncultured, of unquestioned expectant correctness. It is lamentably true that an ambition to become a millionaire in a brief time finds no opening so equally hopeful as preying on human credulity in brazen announcements of a "wonderful medical discovery." This is not only a personal matter of the greatest importance, but it is also a national question of the degeneracy and undermining of the physical strength of the people, thus seriously enhancing the condition of invalidism, which should appeal to every thoughtful philanthropist.

A true knowledge of medical science is not alone for the cure of disease, but to enable us to *prevent* disease. The study of physiology in our common schools effects but little in the way of prevention; such study only contributes to a comprehension of vital action in health. The general principles of pathological vital action should be taught; otherwise no comprehension can develop of that department we care not to experience and wish to avoid. The time is coming — and it will be of much greater value than a pension — when each state will furnish free to all homes some general instruction of the *meaning* of pathological vital action, together with some general principles of management in aid of recovery and proper appliance until the arrival of the physician. In place of this, we now have a multiplicity of recipes and medical compounds for applied experimental practice, the relation of which, together with the nature and law of the disorder, are subjects entirely outside of the comprehension

of the people. While the present plan of "active medical property" has supplied premises which reflect most seriously against the acquirement of scientific principles implied in organic force, it furnishes no premises for thought which can be distinguishable by the laity unlike what the ignorant pretender can supply, with equal fluency, in praise of the many curative abilities pertaining to his latest discovery. The people have not been made to comprehend that there exist great and important fundamental principles in the *nature* of organic force, of great significance in giving usefulness and distinction to a special professional culture.

So long as the doctrines of a medical science are so low down in scientific attainment that the ignorant pretender can often command the entire confidence of the people, and so long as medical practice is based on the level of a presumed *agency* outside the human organism existing in the name of "active medical property," there will

seem to be required some interference by the legislatures to protect our people. When we seek legislative interference to establish lines and controlling judgment of protection, we may find much consolation in the fact that no legislative act has ever been required to prevent ignorant people from making astronomical calculations, or practising the science of chemistry. It should be made susceptible of comprehension that medical science is a department of science of organic forces, requiring greatly superior ability to reap its many advantages over what is required in the departments of inorganic science. Medical education should elevate medical doctrines to the standard of a science, in harmony with laws made and provided.

The ideal medical science with a very large majority of the laity is but slightly removed from the low level of a mechanical appliance of a medical power to keep the organic machinery in motion ; while as a fact no other department in the affairs of Nature

in which the mind has had cause to make research reveals such intricate and wonderful expressions of Divine wisdom as may be found in this department, with which the physician has occasion to have intimate relations of acquaintance, — a required acquaintance and comprehension so far above all possibility of attainment without special culture, that no reasonable person entertaining a belief in such a department of Nature would dare trust for a day the management of his invalidism in other hands than those of one specially educated to comprehend the laws of organic force which execute every act of life.

WHY DO PEOPLE DRINK ALCOHOLIC SPIRITS?

THIS subject is so controversially related to the medical doctrines of the period that it becomes difficult to do justice to this source of human affliction without coming into complicated relations with the department of medical science. We find an expectancy with the people which is supported by a common culture, or consent of belief, which becomes experimentally seriously at variance with long anticipated results. And to make reply to the question, Why do people drink alcoholic spirits? would include premises which imply explanations dependent on the doctrines of our medical schools; and we are persuaded to say that in the name of *two* alleged reasons may be found *cause* for such practice.

One cause is dependent on the fact to which we alluded when considering the four vital properties; namely, that sensation is a department of human experience of irritability and pain in one direction from the normal standard of such life property, while in the opposite direction a condition of agreeable sensation can be made to prevail from a contact relation of certain material, in the list of which alcoholic spirit is included. Now, it is further to be considered that the sensation thus occasioned, which becomes more pleasurable or agreeable, and is sought to be made more satisfactory, is very largely an agreeable experience of comparative relation; that is, a previous disagreeable sensation is being experienced, which it is desirable to make pleasurable by the use of alcoholic spirit. Now, it is this *fact* which contributes to develop the inference that whatever causes a person to *feel* better becomes valid evidence in support of the appropriateness of the practice which has been pursued. While such

may be a justifiable conclusion in many instances, it is far from being correct in *all* cases.

It should not escape notice that such exhilaration is a deviation from that *normal* standard of sensation that is *later* followed by an opposite disagreeable sensation that might not otherwise have prevailed to that extent, — which condition may again find cause acceptable for the repeating of the same practice. With many, a primary agreeable nervine sensation is experienced which becomes quite fascinating as a condition of pleasure, and is repeated in anticipation of a “glorious good time,” without thought of what may attach to such practice later. Thus one is deluded by an inferential reason, which encourages a practice that develops abnormal sensation on *each* side of the normal standard of a healthy sensation. That is, one feels better, and he feels worse; and he thus continues to live a see-saw life of up-and-down, trying to establish a continu-

ance of normal balance of healthy sensation. Such application often prevails with medical treatment.

The reason and philosophy of the party indulging in this experience is made to apply *only* in one direction; that is, when he has the experience of a disagreeable sensation, he resorts to the experimental practice which contributes to a better feeling, — omitting to infer that the same cause may develop first a better and then a worse sensation, thus *never* recovering that continuous balance which has no occasion for further appliance of anticipated improvement. The victim of delusion with this fascinating experience fails to recognize that the science of anticipated recovery is implied in the omission of such remedy rather than with its continuance. Thus the department of sensation in human experience often becomes persuasive to the drinking of spirituous liquors.

While *one cause* is found with relations to sensation, the other *cause*, of far greater mag-

nitude, is found in the *belief*— which is supported both by educational precept and by a multiplicity of example — that alcoholic spirit contributes a latent aid which sustains and comes to human relief when vital powers are prostrate, and thus runs the machinery of life while the vital powers are recuperating. From the United States Dispensatory, the standard authority on matters of this kind, we quote: “Alcohol is a very powerful, diffusible stimulant; in a diluted state it *gives* additional energy to the muscles and temporary exaltation to the mental faculties.” This accepted authority does not inform the reader that stimulation is a phenomenon exhibited by the *involuntary* life forces, of precisely similar principle, so far as it is a *gift of energy*, as is that of the whip which gives stimulation to the *voluntary* life forces of the horse.

An eminent Professor says that “there are conditions in which alcohol acts simply as material for the production of force, and may

be looked upon as a food which requires no digestion, and sets free in a useful form its latent energy." Without waste of words in discussing the premises, it remains a *fact* that the practice of drinking spirituous liquors is based very largely on the *belief* that some mysterious prophylactic or supporting agency is derived from such compounds, — a belief further supported by the *agreeable sensation* produced by them, while no delusion ever had a stronger hold on a people. Anti-alcoholic literature is more freely circulated each year, although such literature has never made issue with doctrines of medical schools to any noticeable degree, yet they have been recognized sufficiently to require a review of the premises.

Says Ex-Senator John J. Ingalls: "I admit the prohibition question is one of the most stupendous questions that ever engaged the attention of the human mind. It is one of the greatest problems of the present century." Now, we ask, why does this question

assume such mammoth proportions? Simply, because our institutions of law are trying to suppress what our intellectual and scientific institutions are advising our people to do. Or, in other words, an effort is being made to coerce a people to do right, while they are continually being educated to do wrong. Give our people correct thoughts, and we shall have less use, or no use, for coercive measures with the intelligent. Our medical books and medical teachers continue to affirm that alcoholic spirit *gives* support to the human organism, and this, together with the administration of alcoholic spirit for nearly every conceivable ailment, causes such an irresistible tendency of conviction to this erroneous belief that but few minds can repel the persuasion. What reason have the people for *not* thus believing?

Such is the practice of the physicians with the laity, and also of the laity with themselves. They most conscientiously think that it is right, and they do not think that it is

wrong. The direction of a thought may determine the destiny of a nation.

While the temperance advocates may condemn the practice of dram-drinking, and desire to inflict punishment for the practice of what drinkers are educated to believe is right, we should exercise much charity in their behalf; especially while they are struggling to comprehend the mental problem how it is that an alcoholic mixture well sweetened, with mint in it, which makes them *feel* better, and which the United States Dispensatory affirms will "give additional energy to muscles, and a temporary exaltation to the mental faculties," can be any *less* useful when they take it on their own judgment than when they take it by advice of the physician. The individual who prescribes for himself knows better than the college doctor that his muscles are tired, and that his brain is in need of exaltation. While our nation entertains much pride in its developed influences of education, we find that

in this particular direction the punishment of the individual who seeks to profit by his education is advised through legal channels.

Medical literature the world over informs the people that alcohol is a "powerful stimulant." It is important that we examine this language, go down into it, find out what it means and how it applies,—whether such term is expressive of a scientific principle and fact, or an undefined phraseology of merely business convenience. If this language is expressive of a something which has a counterpart in certain phenomena, we should examine the phenomena, get down from the dignity of education to the business of comprehension, which may afford a correct idea with the laity, and possibly with the profession in some instances. It becomes extremely important to examine these phenomena, which are implied in a fulfilment and presentment in the name of "powerful stimulation," to endeavor to learn their true explanation,—whether or not the explanation holds any

relation of sequence to the language which is made symbolic of such phenomena as a *gift* of energy derived from the alcohol. It is important to compare the general *belief* on this subject with the *facts* implied in it.

What is stimulation? what is really done in the act of stimulation? and what power is involved in the doing? Let us try and understand this correctly.

Now what is implied in the general belief of the laity, as a presumed fact, is that the word "stimulation" as an applied term signifies that an artificial supply of *power* from another source has been introduced to help propel the machinery of life, or "set free its latent energy" in aid of individual support. Is this idea correct? For the purpose of illustrating the "powerful stimulant property" or "action" of alcohol on the human organism, we place in the stomach a certain relative quantity of alcoholic spirit, and watch for the new phenomena, the new facts of

activity, which may come to our notice. We discover an increased activity of the heart; a larger volume of blood is propelled through the superficial vessels, with an increased temperature of the skin. This *fact* is called the evidence of stimulation, or manifestation of the “*action*” of alcohol. We now know what has been *done*; but what power or action really *executed* this new order of doing? The people have been persuaded to accept the inference that this increased activity of the heart, in this illustration, is due to the supply of an *artificial energy* introduced into the human organism from without, which energy is inherent in the alcohol.

It is now before us to consider whether this increased activity of the heart, as a *fact*, is due to the supply of a *new* power, or is an increased action of the *vital* power of the individual, thus directed in relation to the alcohol with an instinctive view to elimination. This is a very important problem in practical science.

We are under obligation to consider both forms of this proposition. In support of the latter, we should seek such premises as may afford a reasonable analogy. We find that the great *plan* of life has endowed human involuntary vital ability with a limited power to expel foreign material. No one denies this as applied to various other material, and it is rational to infer that the *plan* remains the same with *all* foreign material. And who denies that alcohol is a foreign material, when existing within the human organism? The possibility of a continued existence of the individual requires that foreign material should be expelled. Such is a living vital principle, pointing in a direction which affords us rational premises to infer, to say the least, that the activity called *stimulation* is none other than the individual vital ability *acting* with more energy in this particular direction. Experiment with alcohol has determined that alcohol and its oxidized product is eliminated or expelled very largely

through the skin and lungs. Now to effect this exit rapidly, an *increased* activity of the heart is implied, to propel a larger volume of blood in that direction. What power propels the heart, — the alcohol or the vital? It seems that the alcohol either *goes* out, or is *put* out: which is true? The heart continues in motion after the alcohol is out, in a manner quite similar to that in which hearts behave that move independently of alcohol.

We think it would be a very delicate problem to determine just when the “active” alcohol power terminated, and the vital power rallied to the rescue. Basing the *practice* on the *fact* that the *presence* of a certain relative quantity of alcoholic spirit may afford *cause* for the heart to send a more voluminous quantity of blood to the surface, we have then to consider that behind such a possible fact must exist sufficient *vital* energy to *execute* such *act*; otherwise, the alcohol presence holds serious relations. If the conditions are favorable, and the physician wishes

to employ this power of involuntary principle — which is the only power he ever does employ — with a view to establish a better balanced condition of the individual circulation, contributing to a more hopeful expectancy of continued life, it is not prudent or wise, from a scientific standpoint, to *pervert* that philosophy or reason which explains the fact. Such a perversion leads to establishing premises derogatory to sound philosophy, intelligence, and scientific professional attainment; also, to dangerous complications.

On the other side, let us examine those premises and facts which have prompted and *do* inspire that kind of reasoning which has endowed alcohol with “*active* stimulating properties.” The apparent proof is found *alone* in the *one* fact that the human organism frequently manifests *more* power in a *certain direction* after a certain quantity of alcohol has been taken into the stomach. This is the *sum total* of evidence in support of the allegation that alcohol can “*give*

energy” to the human organism. crude reasoning, based wholly on appeal with a deduction that fails to exhibit thought of rational principle. It is experiment of bringing chemical compounds low down in classification into contact with living tissues, and claiming ability with the *living principle* in explaining the phenomena of activity.

Considering the *fact* unquestioned that exists a vital power to eliminate, it inferential from a logical standpoint that alcohol, a foreign material, in contributing *more* power, *does* occasionally to the existing vital fund in store. And such premises, how can it be true that alcohol occasions a waste of vital power ever possible that alcohol may be usefully administered in a condition of collapse.

This seeming paradox may be illustrated first, by considering the fact that alcohol is expelled largely through the skin, and the heart's action becoming affected.

affords a much greater fulness of superficial circulation. Now, the condition of collapse is one of internal congestion, with a superficial deficiency of blood, — coldness of surface. The unbalanced condition of the blood tends *more* to death in many instances than does the *existing* prostration. When this is true, — remember it is not always true, — and there is a *remaining* vital energy to a certain degree, it becomes possible that the *presence* of the alcoholic spirit may be a *cause* for the vital energy to display its powers in that direction which will establish a more *nearly* balanced circulation, which condition is *far* more favorable to the continuance of life with a *less* stock of vital energy than would be the existing condition of superficial coldness and internal congestion. Practically, and with a correct philosophy to guide us, it becomes a difficult problem to solve, many times, whether the existing vital energy in the individual case before us will safely admit of this practice. If one *believes* that

the *phenomena* called stimulation are from *active energy* belonging to the spirit, the practice is liable to that result which would exhaust vital energy and permanent collapse and death at a period.

We sometimes entertain the question many recognize such principles as consistent with the use of stimulants? And we have had good cause in some instances to believe that the practitioner in giving alcoholic spirit had no other idea than the expectancy that he was transferring *energy* to his patient. Practising from correct premises, there would be much to discourage the expectation that the use of liquid nourishment and external heat with less alcoholic spirit, would be possible in many cases. The doctrine that stimulation is a "giving of additional strength to the individual when introduced with the stomach, is in principle and fact quite similar to that strength or energy which

gives to the horse when applied outside the stomach. The two illustrations are alike, with this distinction: the alcohol may occasion the *involuntary* vital abilities to manifest strength in a direction which would not otherwise have been exhibited, while the whip may occasion the *voluntary* abilities to manifest strength in a different direction. The philosophic delusion which encourages to the belief that alcohol may *tone* up the system may find that support in the dignity of education which seems to forbid criticism while the application of the whip to *tone* up a horse would appeal to that society with a long name.

Alcoholic spirit may sometimes be of possible use to *cause* a different direction of vital activity under some circumstances; yet alcoholic spirit does not contribute energy. In illustration of the doctrinal and applied use of alcoholic spirit, with a view to contribute supporting energy, we have an example for which the English newspapers become re-

sponsible. Prince Albert was "kept on stimulants for five or six days," but all sudden prostration supervened, and the *phoid* set in, and the end came. The kind of treatment which many eminent men received during their last days is a sight not pleasant to contemplate with rational expectancy from a standpoint of conservation of vital energy. Because no one doubts or condemns the propriety of certain treatments presents in itself no evidence of its correctness. The human family are on record as unanimous in many beliefs and practices of serious detriment to both physical and mental capacity. The people should take sufficient interest in those subjects which relate to the possibility of a continued existence otherwise, and demand that some measures be adopted to cause a review of the implied principles involved in the present. The dignity of ignoring many important scientific questions is far from being consistent, or conducive to the legitimate

mands and requirements of a people. When we seek to propel the heart by the continuance of the presumed alcohol energy, the person dies when the vital energy becomes exhausted, rather than the alcohol supply. The continuance of the *presumed* alcohol energy always exhausts the vital energy. Now this is a singular fact, provided that alcohol contributes a gift of energy to man.

The so called *toning* up of the system with alcoholic spirit receives approval, not for real value received of strength, but for the more agreeable sensation occasioned while the patient is gaining strength from nutritive supply, which is mistaken for an incoming of strength, the agreeable sensation becoming a soothing solace to hopeful expectancy. To what extent we are justified in contributing to agreeable sensation with such appliance is a question not of legitimate discussion at this time. The happiness of life comes to the individual through their Sensation and Sensibility, and many people seek to enjoy the

former to an abnormal degree, rather than the higher pleasures of the latter. It should have appeared in the Great Book of the Law, in the phrase, "Be moderate with the pleasures of the senses." The pleasures of abnormal stimulation derived from alcoholic spirit, and tobacco are of great detriment to the nervous system and to Sensibility.

The doctrine of "energy" as an associated gift of alcohol is really one of the most important subjects for consideration by this generation. Do not permit yourself to consign this question to insignificance. I feel that your dignity of intellect is being put in being called to the importance of this question. It is this belief which is the greatest and most serious delusion that errorist philosophy ever inflicted on a people. During the last twenty years various bills have been introduced asking for Congressional acts authorizing a commission to investigate and report on the evils consequent on the drinking of spirituous liquor, with a view to d

some method which might be of general aid in correcting such evil. The consolidated statistics of misery that might be reported would contribute little aid in frightening a people into better ways. The true method of correcting this unconscious tendency to evil would be to include in such bill a requirement for a report which would appeal to the people on an educational basis. While it is true that such bills have always invoked the aid of *science*, it has ever been lamentably true that there has been no science born to respond to the appeal. An act of Congress to nationalize the importance of this subject through a commission, to be handled as an educational question and presented and supported on scientific premises which could not be construed in aid of political influence, would achieve more beneficial results and promote more harmony with our people than all methods heretofore suggested for consideration.

Erroneous education has ever made con-

scientific conviction and accepted contributory to the continuance of spirit drinking. The first step to set right the thoughts of an people. Says Alexander Bain, in on Logic, when alluding to the intellectual acquirements: "The un where to look for the next opening every brings the pain of conflict debility of indecision." When we premises and intricate relations of wisdom in this department of the forces, there is much to exalt the mind with the belief that a higher pervaded the plans of our Creator of our endowed abilities for a continuance on earth than man has yet comprehend. A new field for the open in this direction, replete with ing expressions of adjustment which persede in expressed wisdom for our all other departments of scientific the brief *résumé* of this subject, we s

accept such facts and premises for consideration as are true. We must engage with this subject in a manner and direction which is consistent with a rational idea of business from a standpoint of fact, and which human intellect will accept as both logical and practical. We are to consider that the human family drink or partake of alcoholic compounds because they have been educated so to do. Their beliefs are supported with an honesty of purpose guaranteed by the doctrines of our medical schools.

The principles of our government, with its liberties of thought and action supported by the doctrines of our schools, makes it unreasonable to believe that our people will be restrained to any great extent by legislative enactments which are contrary to their honest belief and judgment. We cannot afford to be unreasonable and inconsistent with our interpretations of the guiding element of human nature, and thus direct our labors with that opposition which is without rational

reason for hope. We must admit that the kind have been taught to drink alcoholic compounds for the strength which is supposed to impart to the human mind. We must accept the truism that persons drink alcoholic compounds either self-prescribed or from professional recommendation with the belief that a strengthening has thus been supplied them. Objections to this statement are very few, for this belief is supported by the doctrine of our medical schools through all the ages of historic mention; and with this it is reasonable to expect little, if any, permanent reform through legislation. Compulsion also becomes distinctly self-evident; we must look either to compulsion or to legislation for relief. Compulsion does not commend itself to the human mind, and legislation has never been tried. We have a subject before us which appeals to the most profound wisdom of the age, and we find that the medical school doctrine

and alcohol does thus supply a power, the agitation of this subject should cease at once, and the people should be supplied with a large stock of this alcohol power.

All methods for the suppression of alcoholic drink have ever been neutralized by the doctrines of the medical schools. This statement of the subject and problem should not be ignored. The people have a right to demand a better doctrine from the medical schools. This subject is not alone for professional opinions, but one which relates to the masses, and is without pride or dignity of college culture to them. This doctrine of power insures a belief practically carrying to the hearts and homes of our people innumerable woes and miseries of a lifetime of suffering.

Now, if this doctrine of a medical power in alcohol is a delusion, what is to be done about it? What can be done about it? The remedy consists in calling the attention of all thinking persons to this delusion, and

in supplying them with premises which enable them to think on this subject. To think is to become educated; to be educated, only, is debasing to human mental powers. Education comprehends a self-reliance which guides actions into better relations, produces better and results. To whom should we look for that pushing energy which carries civilization to the people? This is not a political question. It is a subject not amenable to party power. It is as far removed from the possibility of adjustment by political means as would be the subject of any other practical question in science. A right use of energy from an intellectual standpoint can do more to restrain and correct human passions in one year than all that legislatures do in twenty years. There must be a harvest if we expect a harvest. The inhabitants of the world at this period have become more amenable to intelligence than coercion. Coercion tempted coercion against belief and education. It always was, and always will be, difficult.

maintain, and fails to command respect. It is well to remember that law is made for the protection of our people, and that the people never demand protection or enforcement of law without the belief that they are in danger. Therefore, while nearly all our people do believe that alcohol imparts a useful *power* to the human organism, it is not rational to expect they will be very persistent for the enforcement of a law which would suppress such a vast amount of expected good. Thus it becomes plain for our consideration, that law succeeds to a moral conviction when it is *ever* successful; that behind the law must be the conscience and positive conviction of our people.

Our people are devising means to avert such calamities, and are looking for hope in some kind of legislation. Legislation may be available with a certain number who are never influenced through educational channels. Yet education becomes the only guide for the intelligent. Yet there remains to be

considered that if this medical doctrine of energy in alcohol, as set forth, is true, the right has an ignorant legislature to suppress, or punish the individual for using and using the curative powers of alcohol for the sustaining and strengthening of the vital organism? If this doctrine of energy is expressive of a *scientific* principle, legislation would be unconstitutional. I have already mentioned that this doctrine of medical and alcoholic power is degenerating the intellect. It begets a belief which supports the assurance that little importance attaches to who shall supply this alleged power. It places a premium on premises for the exhibition of bombast and ignorance, and our people to be robbed a thousand times worse than all the lottery and gaming institutions of the nation could effect, by inducing them to become easy victims of unscrupulous; while the true doctrine of vital *power* only is responsible for the activity exhibited by the living

will become the most efficient protection for the people, and establish a high elevation for professional thought and usefulness, commanding a respect never previously bestowed on any department of scientific culture.

The proof relative to the correctness of this subject, as presented, does not rest on human testimony any more than the doctrine that the earth was the centre of the solar system. It is true that the medical profession have given but little attention to the study of this department of vital power, and the laws which govern this special ability; they have been deluded into the attempt of trying to explain their science from false premises.

We have alluded to the laws pertaining to this subject quite briefly, yet, we hope, sufficiently to awaken an interest for further research. No other department of erudition has been supplied by Nature with such possibilities for the development of genius, judg-

ment, usefulness, and far-seeing dis-
of mysterious forces and compensati-
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have been presented for human consid-
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In conclusion, we believe that
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We may further add, that while w
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the opposite; and it would be a very

fact, with such experience in a new field, to escape good cause for criticism. While we have not been over modest in this direction, we have sought to present such principles for consideration as seem legitimately to belong to this department. And we invite the thoughtful reader to make a most searching and critical review; and where we have exercised more imagination than correct representation of the transpiring events of organic life, we trust no modesty will suppress the making known such fact. We believe in a healthy, honest criticism, which may prune our department of its superfluities, and of traditional doctrines that have ever been in the way of a clearer perception of the principles of a science. While we have only introduced the plan of a medical science, it should be the aim of all true disciples of science to join in establishing premises for a *theory and practice* which may do honor to the intellectual pride of our department, and thus develop the advantages which are

alone possible with a special culture
will be appreciated and recognized with
everlasting gratitude by the deserving
legitimate requirements of an intelligent
people.

SUMMARY.

THE human organism never acquires strength from other material than nutritive. The idea of a medical property being implied in a quality which *heals* and *acts*, and the definition that to *medicate* is to “impregnate with healing substances” are delusions. Material medicine has only physical properties in common with other material, while such material has *medical relations* in place of “active properties.”

We have presented a theory for the practice of a medical science based on the laws of organic force, — a department of unsolved problem, thus confessed by all writers of medical literature who have sought to engage with the enigma of life forces, — a theory that can be verified by the phenomena of

life in quite significant distinction to the doctrine of "active medical property," without representation among the ordinary events of Nature. We have produced a theory of *facts* in medical science, remarkable in its method of applied thought in the relation of disease problems and applications to medical practice. We have presented a new method for the development of thought never before exercised by writers of medical philosophy. We have set up a *positive* theory of medicine, not possible to be supported by mere speculation, and as easily verified through the transpiring events of organic nature as is possible in astronomical science to support the theories of that department.

It is rational to infer that, a theory of medicine being absolutely wrong, the application of it in relation to the lives of men would give us occasion to fear that serious consequences might result from medical practice based on premises where error must be so frequently without possi-

while from the basis of active organic force the disease problem and the treatment of various ailments would receive a very different application of thought relative to methods in aid of conservation of vital energy.

While a correct knowledge of medical science or the science of organic force is a department of paramount importance in aid of that management which may contribute to a possible continuance of life, it is not presumed an easy task to make a doctrinal theory of such department appear void, notwithstanding it may be fallacious, without putting in its place a substitute. A theory of a science which it is sought to retire, as well as the one to be introduced, must each be submitted to the most exacting crucial test that rational reason can apply in explanation of correctly verified phenomena.

While it is the people who are to become the recipients and beneficiaries of a more conservative and life-saving medical practice, we trust they will cause such a critical re-

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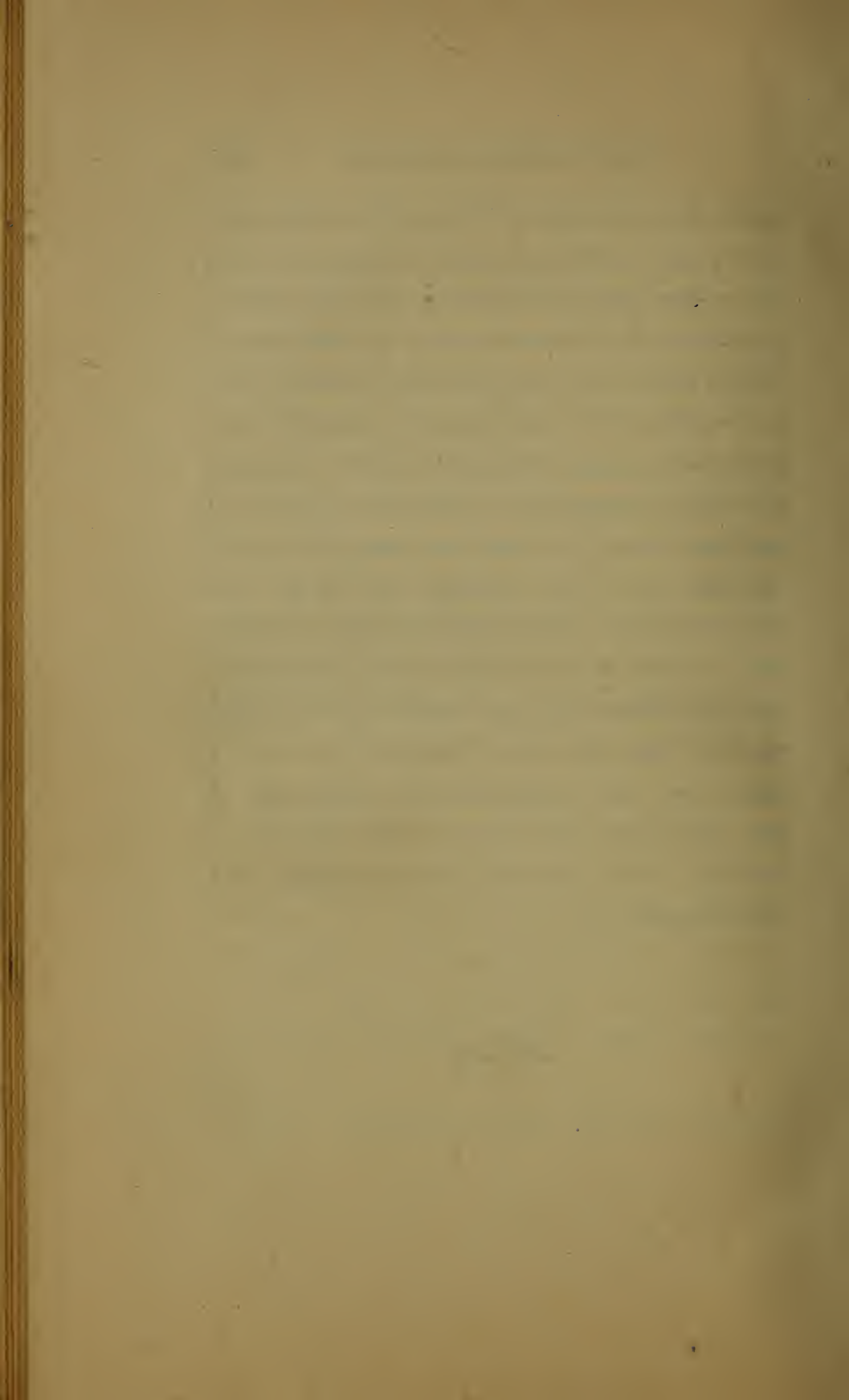
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volume? Are we not compelled to

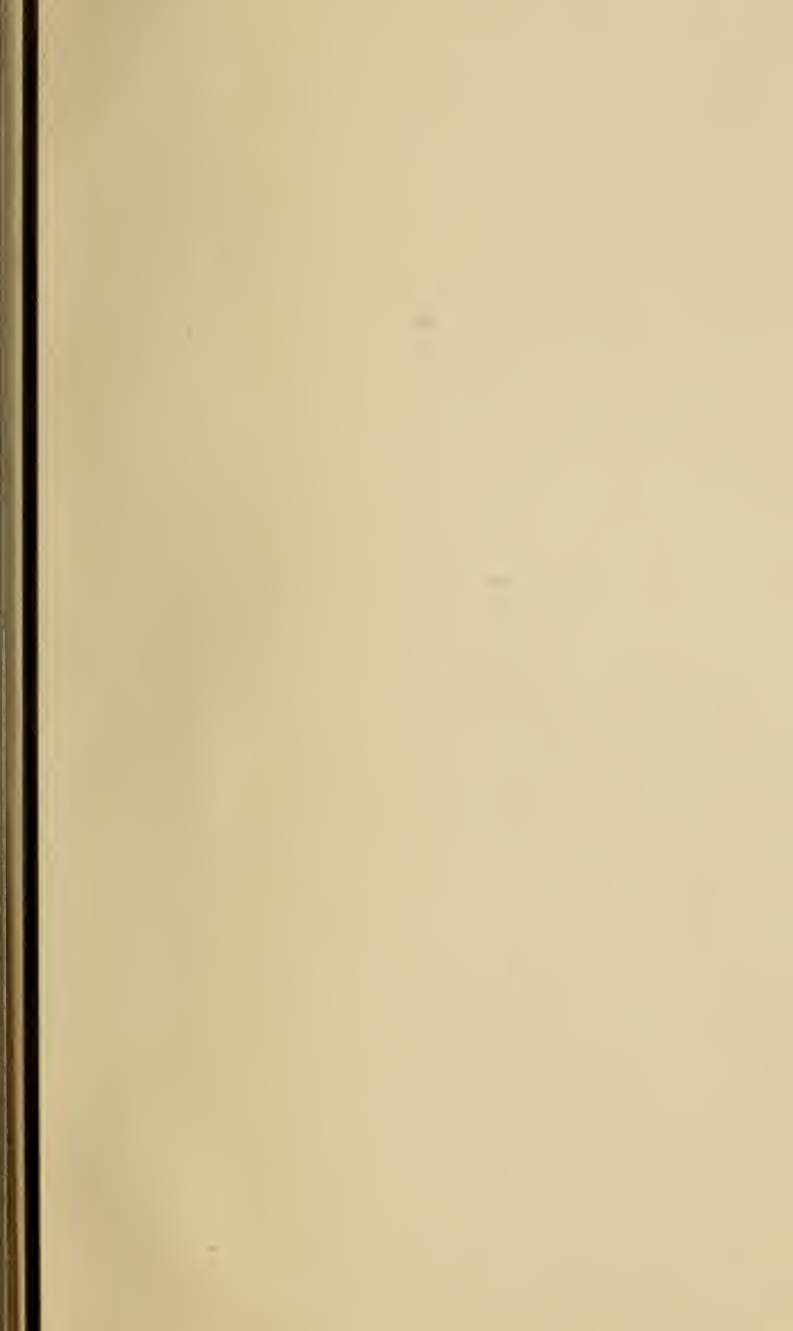
the same methods which have determined the validity of other departments of theoretical science? The doctrines of alchemy were not sufficiently comprehensive and verified to be capable of weighing the chemical theory of subsequent presentment; but determined laws of verified chemical science could weigh correctly the fallacious doctrines of alchemy. The pre-Copernican theory of astronomy was not capable of making a true estimate, and giving correct weight to the validity of the Copernican philosophy, but the reverse. The present doctrines of accepted medical philosophy are not competent to weigh the validity of the doctrines of medical science, based on the vital properties and laws of organic force; but medical science based on the principles of organic force becomes competent to give a correct estimate and valuation of that medical philosophy based on the imaginary principle called "active medical property."

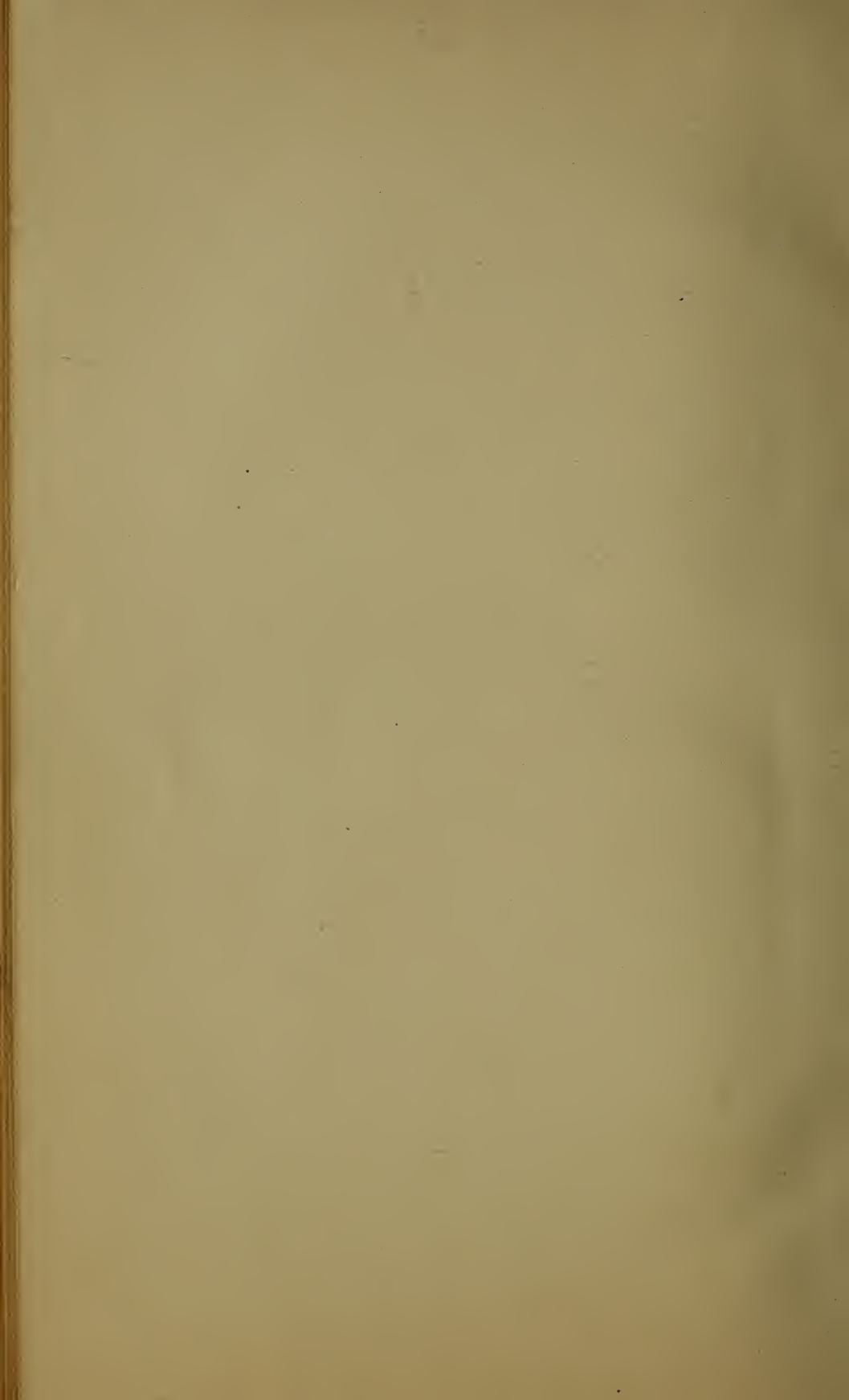
Thus it becomes evident that the validity

and correctness of a theory of medicine based on the principles of organic life like other departments of previously developed theoretical science, must be determined within itself. It must be determined by the verification of correctly named principles and laws in harmony with facts, and in accordance with the transpiring events of Nature. If medical science is based on organic life on a different plan and different laws, and its representation, it becomes the duty of medical scientists to contribute such information. Medical science is not based on the anatomy of man, but man is required to be consistent and comprehensive judgment of the principles and laws of the science in order to make practical the advancement contributed.

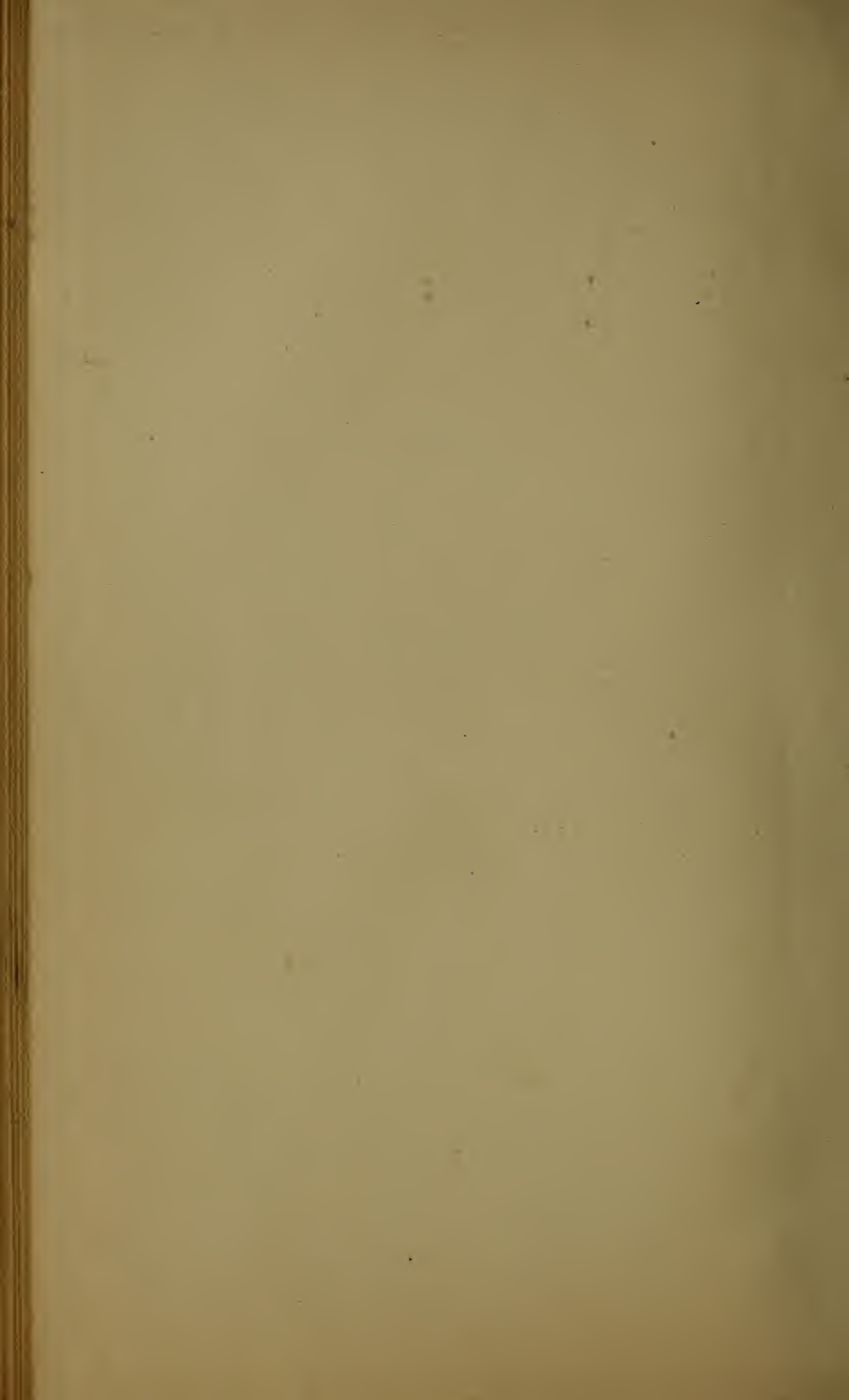
THE END.

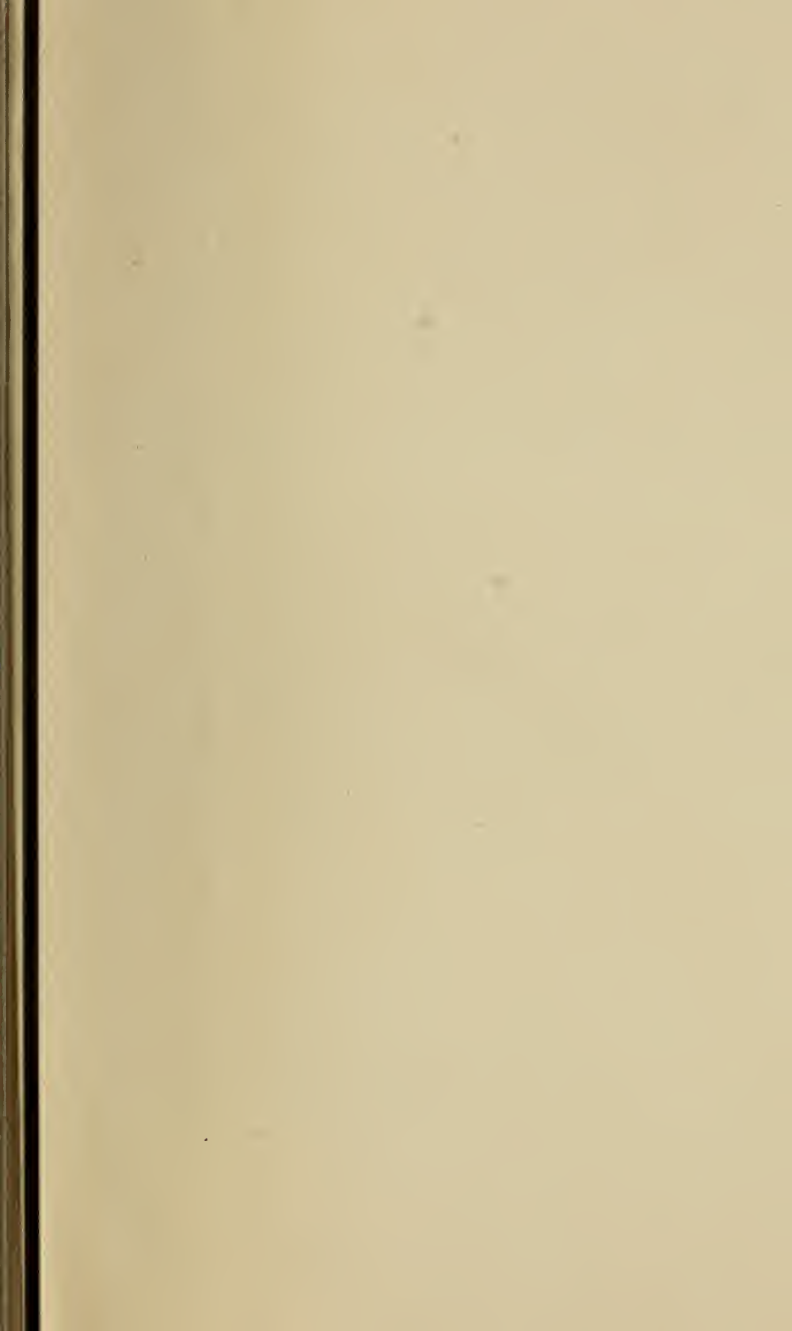












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